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Luck or Knowledge

VERY, very few men are unlucky—they are simply stupid. They didn't think. They only looked at the surface indications, took things for granted, failed to foresee the elements of uncertainty and likelihood, and assumed that all the "luck" would break their way. Then when the inevitable followed they cursed their luck.

Study the reasons for failure. Did you consider the frailty of mankind? When you bought a place you never saw, did you remember to consider that human greed has no limits, and that men will lie a lot to sell at \$30 an acre sand flats that they bought at ten cents—and you got stung! Maybe the seller was honest—but did you know? The horse was sound and kind, without blemish—but it came in with a lot, and the dealer may not have known that he balked.

The child was on the verge of convulsions and you prescribed the right remedy—the child died. The druggist filled the order correctly, but the drugs were old and effete. Your fault? Assuredly. It was your duty to *know* that the drugs were efficient and that they were given properly. There is no shifting responsibility on the druggist or nurse. In the navy, when a ship enters a harbor, it is in charge of a pilot, who then is captain. But if the ship is lost, the real

captain stands a court martial, for it is his duty to see that the pilot understands and does his. The great Italian pediatricist, Prof. Laura, said that under certain circumstances the use of the alkaloids was not a matter of choice but of duty.

When a person is writhing in agony, would you wait for the slow and uncertain action of opium, if you had morphine and a hypodermic syringe? When facing a congestive chill, would you administer powdered bark instead of quinine? When examining eyes, would you insert belladonna or atropine? In treating snake bite, would you use nux vomica rather than strychnine?

Since I know your choice in these four instances, I will state that you are four times an alkaloidist.

I, myself, am several more times an alkaloidist. I should take no chances with veratrum when facing eclampsia, for I have the sure veratrine; or, in treating fever with aconite when I have aconitine; or, in sustaining a failing heart with digitalis, for I have digitalin; or, in relieving chordee with gelsemium when I know I can do so with gelseminine. Prof. George F. Butler once gave a whole teaspoonful (!) of the tincture gelsemium to a cat, and it produced no effect. Robinson found that the

hospital heart-patients were getting no benefit from digitalis, until he procured a good quality and increased the doses.

Tests we have instituted showed variability in the strength of tincture of aconite from four pharmacies to range from 16 to 1. If I gave just enough of the weakest to do the work, and the bottle were refilled with the strongest of that series, what would happen? Bad luck? Or criminal carelessness?

Many years ago I ordered for a young mother fluid extract of jaborandi, to increase her supply of milk—and it dried up her breasts completely. I could not imagine such a thing happening to me now, because I should not think of giving jaborandi when pilocarpine was at command. I once used henbane to quiet excitement—used it timorously and ineffectively, for one never knew what the stuff would do. How funny! Now I use hyoscine, of course.

Looking over a book of old prescriptions, I found mention made of cinnabar, orpiment, and other minerals. Queer! People used to apply Seneca oil as a liniment, and a barrelful supplied the market for a year. How many "active principles" have been isolated from that oil, and how many uses have been found for them!

Don't you think we might apply the same analysis to cinchona with its 30 active principles, to opium with 26, chelidonium with 17, sanguinaria with 6?

There are some things that seem too obvious to justify argument.

The galenic is a club; the wood may be rotten—who knows? The alkaloid is a finely tempered steel rapier—unerring in the hand of skill.

SIGNS OF THE TIMES: VIENNA WAKING UP

Dr. Karl Feri, in No. 19 of the *Wiener Medizinische Wochenschrift*, and Dr. Adolph Kronfeld, the editor of this same journal, both ask the physicians of Vienna to participate in founding a therapeutic society (*Gesellschaft fuer die Gesamte Therapie*). Their invitation begins with these words: "The great progress in the various disciplines of medicine has done away with the

therapeutic nihilism in all branches of our science."

The proposed society is to serve as a clearing house for the immense and constantly growing number of communications to medical literature on therapeutic problems.

The fact that such a declaration could proceed from Vienna, which not so long ago was the cradle and for many years the hotbed of the most extreme therapeutic nihilism, is significant. It vindicates those who always have insisted upon the value of an active, well-considered, and deliberate therapeutic interference in disease, and who persistently have refused to rest upon their oars and watch nature taking its unaided course after a diagnosis was made.

We insist—as we have always insisted—that the making of a diagnosis is only a part of a physician's duties. After the patient is told what ails him he naturally does not rest satisfied, he wants to be relieved of his troubles, he wants prompt, effective treatment to that end.

More power to the physicians of Vienna in their endeavor and in their splendid work! Let therapeutic societies spring up everywhere—real working bodies, I mean, that will go at the subject earnestly and optimistically, giving freely of their experiences and deductions to the profession at large.

In therapeutics, definite and dependable, lies the greatest field of medicine today. Who wants to come to Ravenswood for a three-weeks postgraduate course, and when?

If you are interested, please write me personally!—and now. Our proposed date is early in the fall, the 1st of September approximately.

DR. W. C. ABBOTT.

VERONAL POISONING

A writer, in *The Bulletin of Pharmacy*, tells of a man who took one ounce of veronal and some bromide mixture being found dead the next morning, the veronal bottle empty. The same journal tells of two attempts of suicide, one with arsenic, the other with laudanum. In every instance the druggist dispensed the poisons without a prescription.

The recklessness with which some druggists meddle is shown by the following: A girl who could not speak English well came into the drugstore and pointed to the top of her head. Concluding she wanted a hair tonic, the man of drugs sold her a proprietary of the nature of which he knew nothing. Later it transpired that the girl wanted a nerve tonic, and that she had taken a tablespoonful of the mixture. As the druggist did not know its composition, he was unable to suggest an antidote—and missed another sale.

If there were smiles for sale
 At some fair market where
 The rich, the poor, the low, the high
 Might hurry with their change, to buy,
 What crowds would gather there!
 Yet there are smiles enough,
 And each might have his share,
 If every man would do or say
 One—just one—kind thing each day
 To lift some other's care.

—S. E. Kiser.

GOOD OLD TIMES

The plaintive longing for the "good old times" seems to be exclusively an eastern characteristic. One never hears it in Chicago. Possibly this is because this city has no old times. Beginning as a straggling village, sprawling in the mud at the mouth of the river, it has grown to beauty and power through a long hobbledehoy stage. We look upon the East as old—so old as to demand of us a bit of reverence, or what comes nearest to that sentiment in the Chicago mind.

So it is with somewhat of a surprise that we read, in the *Bulletin* of the New York Health Department for March, that municipal sanitation began with that city after the close of the Civil War. As late as 1866 her streets were unpaved or covered with cobblestones, with hardly a pretense of cleaning. Ashes and garbage were dumped in the street.

In Brooklyn, no arrangements existed for removal of garbage, but when things got too bad the new Board of Health undertook the task. Few houses were connected with sewers. Offensive trades—bone boiling, fat rendering—went on without let or hindrance. Cesspools reeked with filth.

Many cattle were kept in unsanitary stables and fed upon distillery swill. Manure piles mounted high, cesspools overflowed, numerous hogs were kept within the city limits, and the human death-rate in 1865 was 30.3 per 1000.

As late as 1889 the writer found, in Philadelphia, a lodging house with 150 inmates where there was no toilet whatever. And neither was there a law or ordinance by which the owners of houses already built could be compelled to install toilets. Market produce, abattoirs, tenement houses were in a condition properly designated as "fearful."

Under the rule of the Health Department, matters have so improved that in 1911 the mortality in Greater New York had fallen to 15.2 per 1000. The care of the city's children is one of the brightest pictures in American urban life, especially since the organization of the Division of Child Hygiene, in 1908. Medical inspectors instruct the mothers, nurses visit the homes. Stations for supplying pure milk dot the slums. An effective war is waged against tuberculosis; and the laboratories furnish free antitoxin.

One especial reason for the notable success of the New York health department is its independence and command of means. If it needs money it issues bonds, and gets it.

THE LIMITATIONS OF DIAGNOSIS

The importance attached to diagnosis should not be accorded the dignity of a fetish, with corresponding injury to the patient. Some patients recover without a diagnosis, to the amazement and discomfiture of the attending surgeon. Our zeal in the pursuit of scientific accuracy should never obscure the interests of the individual. The use of potassium iodide, for instance, as a test in pulmonary tuberculosis is possibly dangerous in its tendency to aggravate the disease. The use of tuberculin may be of doubtful advisability because of its attendant danger, while other diagnostic agents may be more or less injurious. We should not forget that diagnosis is not the end of medical practice, but a means.

There is frequently a tendency to magnify diagnostic details which, however important in theory, may prove highly prejudicial to the welfare and comfort of the patient when tested by actual experiment.

The use of dangerous methods is not, of course, to be rigidly denounced; yet in their employment all the circumstances of the case should be duly considered and the question carefully weighed: Do the possible advantages conflict with the evils which may arise and their consequent detriment to the condition we desire to remedy?

Young physicians are especially prone to exalt the nature and uses of diagnosis, which, though invaluable when undertaken by a skilled practitioner, not infrequently tends to lamentable illusions in inexperienced minds. So powerful an ally, even prerequisite, to intelligent procedure requires profound study, lest the object of therapeutic aid be ignominiously defeated.

Real men are developed by difficulty. With such men there is no thought of yielding in the face of danger—only the determination to go forward with courage, and to overcome.

GERMAN GREED AND AMERICAN GOLD

The Journal of the American Medical Association deserves the commendation of the profession for pointing out the extortionate methods of the German manufacturers of the "patent" coaltar chemicals so largely prescribed by American physicians.

In the Association's chemical laboratory a careful examination was made of different samples of phenacetin and of the identical product admitted to the United States Pharmacopeia under the name of acetphenetidin. Phenacetin originally was patented in this country by the Farbenfabriken of Elberfeld Company, which still supplies it. The patent expired years ago, and the Company now has no proprietary interest in the word "phenacetin." At present it sells this substance both as phenacetin and as acetphenetidin, while it is also manufactured and offered for sale by several other concerns, under one or both of these names.

The striking fact revealed by the Association's inquiry was, that, while acetphen-

tidin and phenacetin are chemically identical and of equal quality as sold, *the price charged for the latter is five times that of the former.*

The *Association Journal* might have gone a step further and pointed out that phenacetin is only one of several patent-expired products for which, under their old patent-names, exorbitant prices are still charged by their German makers, and which, under their chemical names, are now procurable (of presumably equal quality) for a tithe of the prices of the former. Here is an interesting list:

TRADEMARK NAME	PRICE	CHEMICAL NAME	PRICE
Aspirin	\$4.40 lb.	Acetylsalicylic acid . . .	\$0.65 lb.
Veronal	21.00 "	Diethylbarbituric acid .	5.76 "
Heroin	8.00 oz.	Diacetyl-morphine . . .	3.55 oz.
Aristol	1.55 "	Thymol iodide34 "
Sulphonal	1.15 "	Sulphonmethane14 "
Trional	1.30 "	Sulphonethylmethane . .	.24 "
Duotol	1.25 "	Guaiacol carbonate16 "
Urotropin60 "	Hexamethylenamine . .	.04 "

The first two in this list are still protected by product patents, though it is more than likely that the celebrated aspirin suit may be reopened and that the patent may later be declared illegal. The prices quoted for these two under the chemical name are those charged in England where there is no product-patent protection.

The remainder of the products listed are no longer protected by patent in the United States; therefore, the prices charged for the fancifully named articles are purely arbitrary ones. Glance through the list, and you will realize something of the enormous toll being gathered by the German chemical manufacturers from American physicians and their patrons.

The preceding relative scale of prices will apply substantially to many other remedies upon which the patents have expired. For lack of space we do not give a complete list, nor quote prices; but the "method" and "scale" apply in the sale of salipyrin (antipyrin salicylate), euphrophen (diisocresol iodide), benzosal (guaiacol benzoate), lactophenin (lactyl parphenetidin), salophen (acetylparamidophenol salicylate), xeroform (bismuth tribromphenolate), and other preparations of a similar nature.

It would be interesting to explain how these German patented-medicine makers, as patents expire, play the whole gamut of molecular interchange, in order to evolve

wonderful "new" products, and thus keep the doctor "coming." But that is another story!

The moral of the *Journal's* exposure of the long- and well-known German chemical-maker's methods is, for the physician to use honest products of recognized merit, as procurable from good American chemical houses. By so doing, they will discourage this "scientific" extortion and encourage our American chemical industry, which needs but the support of American physicians to rival in extent, as it already does in quality of products, its not overscrupulous foreign competitors.

American physicians and their patients are being relieved of millions and millions of dollars by these skilful manipulators of our all-too-lax patent laws—laws which protect the foreigner and squeeze out our own people. And presuming upon the ignorance of American physicians in chemical matters, they manage to keep the flood of American gold still rolling into their pockets long after the "protection" of these laws has ceased to be legally operative.

Isn't it time that you, doctor, "got wise" to these facts? What's the matter with a little more of the sentiment of "America for Americans"?

Ah, Love! Could you and I with Him conspire
To grasp this sorry scheme of things entire,
Would not we shatter it to bits—and then
Remold it nearer to the heart's desire.
—Omar Khayyam.

TREATMENT OF THE HEART IN SYPHILIS

On the basis of his experiences in fifty cases, Dr. Harlow Brooks (*Medical Record*, February 24, 1912) asserts an almost universal occurrence of serious cardiac lesions in syphilis, which, he claims, begin early in the disease, and which possess, through the later stages, a largely irradicable character. These lesions have no other characteristics than those of myocarditis or aortitis, or a coronary sclerosis, yet when these signs appear and any possibility of syphilitic infection be present, the case should be given the benefit of the doubt, disregarding the age of the probable lesion.

If really permanent benefit is to be expected in these cases, treatment must be instituted very early, probably early in the secondary stage, and the drugs must be pushed to their full physiologic limit. Curschmann long ago reported good results from iodine in cardiovascular syphilis. Longcope, also Collins and Sachs, called attention to the fact that syphilitic disease of the circulatory organs demands active treatment with mercury pushed just as vigorously as in acute syphilis of the central nervous system. The author believes that salvarsan is no more dangerous in cases of marked cardiovascular disease than in other and seemingly simple cases.

The beginning of genius is the power of desire. Genius is inspiration, desperation, and the culmination of perspiration.—Alfred Montgomery.

ON THE CAUSE AND TREATMENT OF INFANTILE BERIBERI

Accustomed as we are to observe a very much lower mortality among breast-fed children than among those fed artificially, it strikes us as very strange to find (*Bulletin of the Manila Medical Society*, 1910, November) that, in the Philippines, the mortality among infants is greatest in breast-fed babies. Chamberlain and Veder, of the Medical Corps, U. S. Army (*Bulletin of the Manila Medical Society*, 1912, February), have shown that one of the most common diseases of infancy prevalent in the Philippines, called *taon*, *taol* or *suba*, is justly considered to be infantile beriberi.

Assuming, with very good cause, that beriberi and polyneuritis gallinarum are due to the same dietetic deficiency, that is, to the use of highly milled (polished) rice, as a principal article of diet, and having found that the polyneuritis of fowls is cured by the extract of rice polishings, these investigators determined to treat cases of infantile beriberi by administering their extract of rice polishings to sick infants, while permitting them to continue nursing.

Previous to their work, rice polishings had been used in the treatment of infantile beriberi, but the polishings had been ad-

ministered to the mother, and lactation had been suspended, the child being fed artificially. The proceeding of the authors, which appears very much more sensible, proved successful in fifteen infants, which they treated with the extract of rice polishings.

Their patients were all breast-fed, and, with one exception, all under the age of three months. The disease was usually ushered in with vomiting, which, after a few days, was followed by great restlessness, sleeplessness, continual whining, and later by dyspnea and increased cardiac action, together with edema of the face and legs. Still later oliguria and aphonia developed in many of the patients.

The authors conclude, from their results, that the extract of rice polishings is a cure for beriberi in the true sense of the word, just as lime juice is a cure for scurvy, and that it acts just as promptly as fruit juices do in infantile scorbutus. Their mode of preparing the extract of rice polishings is given in detail in their paper, to which we refer for particulars.

The scientific interest attaching to the observations of the authors is hardly less than the practical importance, since their work almost surely disposes of the theory that beriberi is a toxemia. It is most irrational to suppose that such an extract of rice polishings could cure a child in a few days while the child was still receiving the toxin which had originally produced the condition. The infection-theory is even less tenable, since so sudden a cure would not be likely to occur in an infectious disease as a result of such treatment. Their results, therefore, are a most conclusive argument in favor of the dietary origin of beriberi.

One can hardly fail to be convinced that beriberi is due to a deficiency of some as yet unknown substance in the food, and that infantile beriberi is produced in those children who receive milk from a mother suffering from such a deficiency. Otherwise how can the remarkable effects of the extract treatment be accounted for?

The authors regard their work with infantile beriberi as the final link in the chain of evidence which has been built up

from experiments on men and animals, and which proves that an improper diet, usually one consisting mainly of highly milled rice, is responsible for the development of beriberi.

"Right now is the time to 'get busy' and steal a march on your competitor who is going to wait until 'after election.' Procrastination is a prolific breeder of 'lost opportunities.' 'All things come to him who waits'—you've heard this before, but don't you believe it! All things come to him who hustles while he waits.—Robert Brown.

FREUD'S THEORY OF NERVOUS DISEASE

Since Beard gave us the classic description of neurasthenia, this malady has been universally accepted and assigned a place in the nosology as a definite form of disease, with well-defined features.

Now comes Freud and seeks to modify our conception of the great majority of the cases heretofore included under this designation, and to these he affixes the term apprehension neurosis. And this condition he attributes to sexual causes, and more especially to unsatisfied desires.

Stripped of technicalities, this condition of neurasthenia is an arraignment of the present social system, and a plea for natural conditions as represented by those impulses that stir in man or woman as animals and are held in check by social, legal or religious restraints. The young man strongly desires to gratify his sexual promptings, but is restrained by timidity; the man indifferent to his wife is powerfully attracted by some other woman; the girl feels the impulse to seek the embrace of a mate, but is deterred by modesty or by the dread of pregnancy and the consequent exposure; but in all these cases the victim suffers from the balking of nature's impulses, and then this form of neurasthenia follows.

The theory flatly denies that continence is harmless, it questions the value and wisdom of self-restraint, and remorselessly traces the consequences of violating nature's law, which provides for the perpetuation of the race despite all social and religious artificial restraints and interferences.

While this deduction is not the one dwelt upon by the numerous writers who have been discussing Freud's theory during the past year, it is the one most directly to be drawn from it, and the most momentous in its influence. In this it is in harmony with the conclusions reached by studies in other and allied branches. The reader of Krafft-Ebing's great work arises from its perusal with a new conception of sexual morality. He reads of instances of perversion with an abhorrence so great that he must feel a certain sense of approval of the hopefulness of the victim who speaks of his ability to accomplish ordinary fornication. The man hopes to overcome his appetite for bestiality or sodomy, since, although he is cold and impotent toward his own wife, he has found another woman who excites and satisfies his sexual appetite and needs. Beside the unspeakable vileness of the former, mere illicit intercourse seems venial, even if not commendable, as a natural, wholesome exercise of a vital function in a normal, desirable manner. If, under such a course, the victim reports the subsidence of the unnatural appetites and resumption of healthy conditions, the question comes to the medical adviser whether he shall look on the case with the eye of the physician-scientist or that of the law-abiding, moral, decent citizen.

Most of those who have discussed this matter take the ground that the two are synonymous, and that continence is possible, harmless, and as a rule beneficial. This is flatly denied by Freud and his followers, as shown by this quotation from Tannenbaum's paper in *American Medicine* for December, 1911, page 643: "The onanist must cease masturbating and, if his sexual appetite demands it, resort to a *puella publica*, with proper instructions." And, again: "The young gentleman engaged to a respectable young lady who must not conceive of sin should be taught the dangers of frustrated excitement and should be advised rather to associate with a *puella publica*."

Judged by the experience of many years in the practice of our art, we should say that the cases and conditions described by

Freud are not numerous or the rule, but rather exceptions; and that neurasthenics are not always the victims of sexual repression or abnormalities. Nevertheless a close and intimate inquiry will develop the existence of this element many times when it has not been suspected by physician or even by the patient. We have known many instances of sexual restraint that have not developed any evil, but, rather, great good, physical as well as moral, in the individual; and we are very far from admitting that such restraint is always or even often prejudicial to the health. If it is so in exceptional cases, these are not numerous enough to justify any change in our present social arrangements, which are better suited to the general conditions of man than any other that have been proposed. Indiscriminate license is abhorrent, and impossible in our civilization.

As to the consequences of transgressing nature's laws and impulses, we are in accord with Freud to a certain extent, and in opposition to some of his followers in some respects. We believe that there is no method by which the natural, healthy exercise of the sexual function can be interfered with, and harm not result. All forms of partial and unnatural intercourse, designed to prevent conception, are injurious.

There is no harmless method of preventing conception—and we hope none will ever be discovered. Whatever evils may follow the advent of more children than people think they can afford, they are as nothing to the interests of the race that are sacrificed by prevention.

Freud has opened up a matter of extreme interest and importance. He has developed Baird's ideas and assigned a group of neurasthenias correctly to sexual causes, but that these comprise the majority we do not believe. His psychoanalysis of dreams is a sidetrack of alluring interest, but we can not enter into that phase at present. Meanwhile Freud has thrown a bombshell into the camp of the Philistines, and we may expect furious denunciation, then, as that subsides, some really sensible discussion of his propositions may follow.

We do not believe it is ever right, by any standard, for a human being to do deliberately and consciously any act his conscience is at the time pronouncing a moral wrong, or that his health will suffer from such restraint. If it should suffer, then there are things more important than health.

A million "goin'-t'-do-its" wouldn't balance one
"has-done."

An' a pound of "right - this - minute" 's worth
"tomorrow's" half a ton.

—Roy F. Greene.

WOMAN—TO MAN

Some wit said: "And God made the heavens and the earth in six days, and he made man—and rested. Then he made woman, and neither God nor man has rested since!"

To which may be added, on the authority of those who have most attentively studied the ways of His Dusky Highness, that the devil has also been kept busy since her advent—and because of it.

Is it true? Is Woman the ultimate cause of that ceaseless drive that impels man to incessant, never-ending, never-completed exertion?

Let us take a look at the windows along State Street: robes, linens, silks, lingerie, hats, plumes, jewels, bric-a-brac, parlor furniture, summer furniture, confectionery, shoes, hose, laces, embroideries, rugs, toilet articles, perfumery, hair goods, and—well! well! here in the twentieth window we discover some ties, shirts, and a few other articles for masculine use!! Must be an accident!

Judging by the offerings of our merchants, man labors to supply woman her home, its fittings, her personal adornment and amusement. Nineteen-twentieths of man's work is for women. But for her, how many men would care to live in a palace, keep up a yacht, a private car, or any one of those other luxuries of a multi-millionaire's life?

The wants of a man are relatively few—food, shelter, rest, clothes, and the latter superfluous except when needed for warmth—were it not for woman. As the struggle for existence and supremacy in-

creases in intensity, the number of men who revert, as nearly as modern conditions permit, to the savage and become tramps, likewise grows greater. The freedom, irresponsibility, idleness satisfy the atavistic tendencies of the man to whom the solution of life's problem comes in the ready phrase, "What's the use"! There is material for a sermon, a book, a life-study in that brief sentence.

Woman creates the home. Where she is, is home, be it a palace or a hut, the gilded cage of the princess or the attic of the poetaster, the cave of the troglodyte or the leafy bower of the Suabian. Where She is, is the goal toward which the Man's steps turn when wearied with the search for food. The Home established, it is the instinct of both to adorn it, to fill it with things useful or otherwise desirable. The instinct for the woman to adorn herself is innate, and the man shares it, because her personal appearance is a matter of pride to him—her owner—and reflects credit upon him.

On these primal instincts rests the modern social system, and from them springs every exertion that has raised man from the level of the Australian savage.

We men live and work for Woman; and, glory be! she's worth it.

It was an essentially oriental conception that the obligation to work was inflicted as a condign punishment. We have learned to recognize in Work one of man's chiefest blessings. Necessity is a stern but beneficent master. It drives; and happy is the man who is driven, because he gets on. It drives him to get education; and he is no longer a savage. It drives him to get food; and Agriculture is created. It drives him to dislike the ugly; and Art is born. It drives him to seek companionship; and the Family is formed. Altruism arises; and men learn to look upon themselves as members of a Community. The horde settles; and States emerge from the chaos. Necessity drives him to acquire Property; and Law is developed. The sharp pangs of disease drive him to the study of hygiene; and Right Living begins. The fear of Death drives him to study and avoid its causes.

And so goes the world. Progress never ceases. Ambition is never satisfied. The woman who glories in being queen of the greatest man arouses the envy of other women, who push their men to topple over the king and take his throne. The man who grows content obstructs the way for one just behind who is not content, and shoves the other one aside, gently or otherwise.

"Push or be pushed" is as inexorable law as the savage "spear or be speared." The Man, the Neighborhood, the Community, the Race, the Nation that is discontented betters its relative position. The Man, the Neighborhood, the Community, the Race, the Nation that is satisfied falls back. Man for man, the Huron was as good a fighter as the Iroquois, yet the 6000 attacking Iroquois exterminated the defensive 30,000 Hurons.

Necessity, Work, Cold, Hunger, Pride, Ambition, Mate-hunger, Avarice, Lust for Power—the evils and sins of man—are the sources of effort and of achievement. Good would be dead were Evil annihilated. The existence of the one without the other is as impossible as the front of a mirror can not be without its back, or the negative pole without the positive, or valleys without their mountains.

ROBBING A MAN OF HIS CREDIT

Nobody expects a doctor to receive any credit for simply doing his duty, but it sure seems hard to do a great thing and then have the credit attributed to somebody else.

A certain prominent citizen has just recovered from a severe and prolonged attack of typhoid fever characterized by several perilous crises through which nothing but the skill of his physician carried him safely. Now that he has recovered the family give the credit to a number of friends who directed toward his bed of illness numerous "thought waves."

How do you know these soul-vibrations had anything to do with the outcome? Giving us any proof of such an effect? The mere fact that you wished a thing and it came true is no proof at all, since the same thing might occur without any wish having been entertained. It is a mere assumption

that the wish had any influence, and there is not a possible shadow of proof to that effect.

On the contrary, we well know that typhoid fever is a disease in which the patient may go to the door of death, may even be apparently dead, and yet recover; and in which the nice and timely application of just the right remedy at just the right time often results in recovery when the case is so desperate that it looks almost miraculous.

Two points stand out in this matter—the credulity of these people, and their gross ingratitude—always providing the newspaper tales are veracious.

Some wise man has called courtesy the "Aladdin's lamp of success." Remember that when you are tempted to pass your neighbor "on the other side" without a smile or even a nod of recognition. If your heart be kind, turn it inside out and let it be seen by the beggar on the street, as well as by the man of affairs.

RELAXATION FOR THE DOCTOR

The institution of the day of rest is attributed to a divine source. Even God rested after six days of work, we are told. Farm animals do a bigger and better week's work if allowed a full day of rest on Sunday. The barber can tell you that he has to give his razors a rest occasionally, to preserve their temper, which suffers if used too long. The only man or thing in all animate or inanimate nature that never needs a rest is the doctor.

The doctor is made on the order of the brook that ran on forever. He is the living example of perpetual motion. He needs neither grease to ease his bearings nor fuel to keep up his power. He works all day—hours not limited—and at night lies half awake listening for the ring of the night-bell. Sundays are worse—the old man is at home and wants to see the doctor. If ever the man had a soul to care for, he has forgotten it, so long is it since he had a chance to attend church in peace and listen to a sermon.

The worst of it is that the wear gets into his work. He falls into routine, and passes his life making visits. Gets up mornings, notes that he has so many calls to

make, allows so many minutes for each, is delayed by unforeseen complications that a fresh, alert man would recognize as most important and interesting but which only annoy him as upsetting his schedule; puts in the evening in office, seeing a few strays and making out bills; is roused at night for a croup or confinement; dozes over a journal when he has a spare hour; and finally ends by resorting to opiates to keep himself at the drudgery. There's the pity of it. Any other man would revolt at the slavery and demand the rights of humanity—the doctor has to keep at it.

Result—he grows worn, crabbed, pessimistic, cross, narrow, set in his ways and jealous of proffered suggestions looking to better methods, a dull routinist who has lost the power of improving. In time, as the drug-habit grows, he falls more into a confined, cramped method outside which he neither goes nor thinks. His field is invaded by all manner of quacks, who waste no time in study save only as they study the weaknesses of humanity and the ways of profiting thereby; the real doctor resents their encroachments, but does nothing to oppose them effectively—he is making visits or trying to collect.

There is always enough routine to fill the days and the mind of the man who lets routine engross him.

In the happy days when King Theodore rules and we can make people do just what we wish, we shall send that man a writ directing him to report at once to the Bank of the River, for a term of banishment of thirty days. How bewildered he will be! How unwilling to believe he can live, and the world move on, when he has been torn from his rut. But in a few days the congealed vital currents will commence to thaw and to circulate; he will begin to taste the sweets of freedom; of thought, and his emotion will begin to stir. You will be surprised to find what a man there is beneath the shell. The humanity of men, the humor of things, the meaning of life, the objects of endeavor come to him. His experiences furnish him the most novel and interesting tales to tell. He has seen mankind from the inside, life from the seamy side.

To him, all masks are off, all pretense is dropped, all realities are bared. He knows—others think they know. The world sees the imposing facade—he sees the back yard. Society speculates over the ineffable melancholy haunting the features of her queen—the doctor knows she has neglected to take her pill. Mankind writhes under the lash of a Carlyle—the doctor thinks: "Drat the man! he's been eating pork and beans again!" Many a mental and moral kink our friend has straightened out, thanks to his knowledge of physiology and pathology—and of anthropology, and psychology, and helminthology, and a dozen other 'ologies.

That month of freedom is an epoch. The doctor can no more return to his former life than the shattered vase can restore itself. The scent may cling around it still, but, as a vase, its integrity is vanished. The new currents of thought and feeling opened up during this time remain pervious. The doctor's reception by friends and patrons makes him realize as never before what he is to them. The old muck piles, which he had passed many times without seeing, arouse in his nostrils, accustomed to the piney scents, a new feeling of repulsion; and he wonders how a human being can endure such nuisances. But what amazes him and strongly impresses his patients is the new vim with which he tackles his duties. His insight is keener, his perceptions are quicker, his sympathies are deeper and stronger.

I wish I had the gift of saying what is in my mind in a way to carry the message to him who needs it. The brain-weary man, the dulled rut-dweller, the narrow routinist is rarely aware of his situation. It takes dynamite to separate him from his evil life. He has to get out of his rut to see across it. He is not really tied down to his work by duties or the lack of money; he only thinks he is. The earliest stages of paresis are characterized by the patient's utter inability to appreciate his own malady, when everybody else is painfully aware of it.

Doctor, you are not so busy as you think; not so necessary, so essential to the community, not so poor, not so completely engrossed in duty that you have lost the

capability of unbending. You only think these things are so. The folks will not die, without you, unless God wills; and then what can you do? The creditors will be lenient, the debtors feel enough sympathy with you to "ante up" some of their debts to aid the good work. Everybody sees you need the rest; so take it and try to unbend.

Owe nine hundred dollars, do you? Well, make it an even one thousand then and go fishing. Mrs. G. is expecting a baby, is she? Well, do you remember the day when no woman was expecting a baby? Ever know of one coming uncared for? Can't possibly raise the expense of a trip? Get half a dozen of the men you know need it to go and take you as doctor—they'll be glad of the excuse and of your company.

In any and all events—go fishing.

If the world is going wrong—forget it. Sorrow never lingers long—forget it. If your neighbor bears ill-will: if you owe an ancient bill—square yourself, my good friend Bill—and then forget it! How about that over-due subscription?

CONCERNING THOSE OPPOSED TO DRUGS

In a little eddy from the current of the Father of Waters, in the swamps of Louisiana, I picked up a pine-cone—battered, decayed, crushed out of semblance of its original shape, yet evidently a pine-cone. Not a product of the Georgia pines of Catahoula, but the fruit of a tree that stood in the distant mountains of Idaho, four thousand miles from the river's shore on which it has been cast, after many months of drifting. Firmly rooted in the rocks of the northern mountains, the parent tree had stood for ages, dropping its seeds into the little stream that sprang from the melting snows and nurtured its roots. It was fitted to its environment. It could not bear transplanting to the soft alluvium and the sweltering heat of the far South, and if lay a derelict, of no further use except as by its decay it might add to the fertilization of the soil for the benefit of a plant better suited to that time and place.

The little mountain-stream in which that stranger cone commenced its long

voyage had been joined by innumerable others, drawn from many thousand miles of varied countries, and had grown into a mighty river, bearing on its breast the argosies of commerce and the skiff of the fisher; with the flotsam of the Alleghanies and the Rockies, the wooded slopes of the East, the prairies of Illinois, and the sandy stretches of the West. Trees torn from their rootings by the flooding waters, bits of worked wood, boxes, baskets, bottles, relics of civilization's needs, perhaps the rudely cut arrow-shaft of the Indian, drowned wild animals, and, possibly, men, cattle, crops, things growing and designed for many a need—all these drift in the river and are stranded in those amphibia-breeding flats. Their original meaning and objects have been lost, and they are merely waste material that may possibly be utilized for the lowly purpose of food for fishes, or of fertilizers—or not used at all.

On the streetcar, yesterday, I picked up a leaflet issued by the Christian Catholic Apostolic Church in Zion, entitled "Doctors and Drugs, Surgeons and Knives." It opened by tracing the origin of medicine to "heathenism"; but, although temples preceded, churches made no protest against the building of the latter. Then it went on to declare that not one word between the lids of the Bible favored doctors or drugs, and the pamphlet presented the following telling (?) argument:

The Greek word *pharmakeia* means the use of drugs, poisoning, and also sorcery; *pharmakeus* means one who prepares drugs, and also a sorcerer; *pharmakon*, a drug, and also an enchantment; *pharmakos*, pertaining to magical arts. Therefore, inferentially, people ought not to resort to modern medical science. Since in Exodus it is said that "I am the Lord that healeth thee," Jeremiah said, "Cursed is the man that trusteth in man", and "In vain dost thou use many medicines"; and Job told his bad advisers that "Ye are all physicians of no value;" and Ezekiel said, "The diseased have ye not strengthened, neither have ye healed that which was sick;" and James said, "Is any among you sick, let him call on the elders of the

Church;" and Mark said, "And a woman which had an issue of blood twelve years, and had suffered many things of many physicians, and had spent all that she had, and was nothing bettered, but rather grew worse;" and a few more quotations of the same sort—therefore, if one is ailing, he should not call on the doctors, but go to Wilbur Glenn Voliva for relief. Next comes a nice selection of the pessimistic remarks of eminent medical men anent the practice of medicine. As a sample, there is quoted Sir Astley Cooper: "The science of medicine is founded upon conjecture and improved by murder."

In my college days, during our debates in the literary societies, it was the custom, when one of us ran short of other arguments, to go to the great Bible that reposed on a stand and from its pages quote a text that fitted the subject and confirmed our view. Whereupon the opponent would do the same thing and find a text that quite as exactly fitted his view. This went on until by tacit agreement we left the Bible out of our discussions. One could prove or disprove anything by the quotation of isolated verses, taken from their context, and applying them to present-day conditions.

Because Jeremiah thought the invasion of Asia by the Cimmerians was going to reach the region in which he dwelt—which it didn't—and inflict upon the people a punishment for their sins, people here in the twentieth century must not go to a doctor when they are sick. Because Ezekiel favored the Assyrian alliance rather than the Egyptian for the hill-states of Syria, the taking of "salts" is immoral. Because, in that exquisite allegory, Job did not like the advice his neighbors proffered, we should disdain to use the brains with which the Lord has endowed us, and the means of cure which He has placed at our disposal, and ask Him to save us the trouble of thinking and investigating.

Take this idea, that drugs are immoral, and trace it to its legitimate conclusions: Who made drugs—God or the devil? If the latter, then there are two creators, the one totally independent of the other and not under God's control—therefore, two deities of equal power. Is that the Christian doc-

trine today? Then are the self-styled Christians truly devil-worshippers. But, if the Lord created drugs, he had an object and intended that they should be utilized, as we have learned to utilize so many of the priceless blessings dug out of the earth or found as enveloped in plant structures.

Thus to wrest the Bible from its divine purpose and invest solitary texts with a meaning, to be applied thus to things of this day, is to degrade the Book to the category of dream and magic writings. Such efforts are strictly on a par with those of the silly girls who fasten a key in the volume, say some magic words, and, opening at random, find the name of their future husbands. There is something repugnant in this to those of us who hold that Book in reverence and see in it the *summum bonum*, that which presents the altruism that rescues mankind from the animal and makes civilization, all that is good in life possible, and prevents its being overwhelmed by the floods of selfishness and passion.

How about the arraignment of medicine by its own votaries? It is, perhaps, too much for the narrow minds we deal with to comprehend that many of these "smart" sayings are of the nature of after-dinner remarks, not to be taken seriously; or they are the outspoken protests against an unscientific and blind method of using our resources. Exaggerations, and so intended—in order to command attention by their vehemence. The boy who declares there were a million cats in the back yard, the orator who bounds his country by the North and the South Poles, the Orient and the Occident, the politician who predicts that Texas will go Republican, the promoter who promises returns of a million percent on "investments," any of these scarcely expects that aught but a born idiot will take them literally—and they are right.

That such "guff" as the quotations above given should secure a following is a curious commentary on the civilization of the day.

PRACTICAL POSTGRADUATE WORK

Where's the doctor? Gone to Chicago to do postgraduate work. In due time he returns, and the curious drop in to see what

he has learned in the way of new and improved methods of treating the sick. He has brought back a few new stories, mainly of the kind that men tell when there are no women about; speaks of the great men he has seen and the wonderful cases and operations; but besides that he seems to be the same old doctor, with the same old remedies, his only acquisition being a distaste for humdrum work, and impatience at so much a visit, when Professor X gets \$500 for a single hour's carving.

The truth is, that the doctor has spent too much of the time supposed to be devoted to postgraduate work in loafing—chatting with the other loafers, running to witness operations which he never can by any possibility be called upon to perform—but getting one thing he really needs: a good rest. Much better get that by going fishing. Much is to be learned at the postgraduate schools by those really determined to add to their store of knowledge; but the month's vacation is usually spread out too thin to permit of doing much or seeing much to be of any very practical value. It's good as far as it goes—only it doesn't go far enough.

Every five or ten years the real doctor should take a full year off. He doesn't need to go abroad to improve that year to the utmost. May we make the suggestion that he go to one of the colleges and take a ticket entitling him to the run of the classes, and then brush up on anything he needs—anatomy, physiology, practice—and, if he can find an institution where therapeutics is taught (not the modern frills, but good solid drug therapeutics, of the kind one should use in nine-tenths of his practice) let him take in that. After such a period of study he returns to his patients a better physician, with the means of doing better work and saving lives he otherwise would have lost, or at least of giving better and quicker relief than he could before his postgraduate trip. The people would not be long in appreciating the improvement, and his income would grow.

More attention is being given to drugs at the undergraduate colleges. At one, the professor has a beautiful cabinet in which

the colored picture of the growing plant is shown, then the crude drugs, the roots, leaves, bark, wood and other official parts, then the pharmacopeial preparations. At several of the Chicago colleges, the alkaloidal ideas have made entrance, and the student receives really excellent instructions along modern lines, with modern remedies. Such is the case at Bennett, the Chicago College, and at the American in St. Louis. These are all progressive, rapidly growing institutions—and there are others equally worthy in these and other cities.

But what of the man who can spare only a few weeks? The Postgraduate, of course—yet, for the man who wants to study *therapeutics*, we are planning something special. Note carefully Dr. Abbott's special communication on page 688. If you are in the slightest interested, write him at once. This should appeal to you. Don't miss it—don't delay.

THE PASSION FOR INVESTIGATION

Grave charges of inefficiency and fraud against the Bureau of Animal Industry have been preferred by Representative Nelson, of Wisconsin, in a resolution to Congress asking for an investigation of the federal meat inspection.

The importance of the federal meat inspection as conducted by the Bureau of Animal Industry is generally underestimated. An adequate idea of its importance may be had from a consideration of the fact that 30 percent of the food of the American people is meat, and of this 30 percent, more than half is inspected by the officials of the Bureau of Animal Industry of the United States Department of Agriculture.

This far outranks the importance and in the number of skilled men used all other food inspections, including that of the Bureau of Chemistry, which has received so much notoriety through the press.

Unfortunately, Dr. A. D. Melvin, chief of the Bureau of Animal Industry, though quite eminently fitted for the work of directing the meat inspection, is in no sense a publicist, and largely because of this he is unable to rely upon the support of the press and the people to the extent that Dr. Wiley

knew how to attract while he was Chief of the Bureau of Chemistry.

No part of the federal food inspection is more difficult and no other part requires as high technical training as does the inspection of the meat- and food-products. More than eight hundred veterinarians are employed by the Bureau of Animal Industry in passing upon the wholesomeness of the flesh of animals slaughtered for food, and an even larger number of experts in packing and curing meat are employed to see that such meat as is passed by the inspectors is properly prepared after slaughter and truthfully labeled.

The charges on which Representative Nelson relies for his investigation are supplied by Mrs. Caroline Bartlett Crane.

Mrs. Crane has been inspecting the meat-inspection service for some years, and it would be interesting to learn who is paying her for the work. She has traveled extensively and well, and expenses connected therewith have been large. Who has stood the expense?

Mrs. Crane is not a stranger to our readers. She made similar—almost exactly the same—charges to the American Public Health Association at its meeting in Richmond, Virginia, two years ago. The executive committee, after investigating her charges, reported that neither the documents submitted nor her statements, in the judgment of the committee, substantiate these charges, and recommended that the motion for investigation be laid upon the table. This action was taken by the Association.

Mrs. Crane's charges may be simmered down to substantially these. First: Regulations of the Bureau of Animal Industry are such that they practically nullify the meat-inspection law of 1906. Second: The packers have been guilty of grave violations both to the federal meat-inspection law and of the Department regulations. Third: The Bureau of Animal Industry's health standard for animal carcasses is not sufficiently high. Fourth: The Department has issued secret instructions to its employees. Fifth: The inspection of meat for home consumption is not as strict as that for export.

The first charge, "that the regulations of the Bureau of Animal Industry are such that they practically nullify the law of 1906," is wholly untrue. These regulations have the endorsement of the most eminent pathologists in this country, namely: William H. Welch, professor of pathology, Johns Hopkins University; L. Hektoen, professor of pathology, University of Chicago; Joseph Hughes, president of Chicago Veterinary College; V. A. Moore, professor of comparative pathology, Cornell University; Leonard Pearson, dean of Veterinary Department, University of Pennsylvania; M. J. Rosenau, director of Hygienic Laboratory, United States Public Health and Marine-Hospital Service; Ch. Wardell Stiles, secretary of Division of Zoology, Hygienic Laboratory, United States Public Health and Marine-Hospital Service.

The opinion of Mrs. Caroline Bartlett Crane, as against the opinions of the eminent pathologists just named, on a subject of meat inspection, is of absolutely no weight.

The second charge, "that the packers have been guilty of grave violation of the Federal Meat Inspection Law and of the Department regulations," is true, but the violations have been remarkably few, and a compliance of the packers with all the regulations has been secured or else federal meat inspection has been withdrawn from their establishments and the privilege of interstate commerce in their products denied them.

The third charge, "that the Bureau of Animal Industry's health standard for animal carcasses is not sufficiently high and lower now than it was previous to the enactment of the Meat Inspection Law of 1906," is an unpardonable misstatement of facts. Regulations have been changed, from time to time, in accordance with new discoveries of animal pathology, but a comparison of the regulations of 1906 with those of 1908 and later will show that these regulations have continually been made more rigorous, and that the percentage of condemnation now, as compared with that prior to 1906, is 50 percent greater; as may be ascertained by anyone from published reports of the Department of Agriculture.



The Reign of the Knife

By THOMAS G. ATKINSON, A. M., M. D., St. Louis, Missouri

EDITORIAL NOTE.—If you would realize the brilliancy of the work that has characterized at least one branch of our profession, read this splendid tribute to the surgeon. It will make you proud that he is of our common profession. It is a story that might well be known to your patients. Put it into their hands when they begin to belittle medicine. It should be an inspiration to the interest—for we are fully convinced that it is "our turn next."

READERS of Dickens in general, and of "Pickwick Papers" in particular, will recall the conversation between Mr. Pickwick and Mr. Jack Hopkins of St. Bartholomew's Hospital, on the occasion of the memorable party given by Mr. Bob Sawyer at his bachelor lodgings in Lant Street, Borough.

"You're late, Jack," said Mr. Benjamin Allen.

"Been detained at Bartholomew's," replied Hopkins.

"Anything new?"

"No, nothing particular. Rather a good accident brought into the casualty ward."

"What was that, sir?" inquired Mr. Pickwick.

"Only a man fallen out of a four-stair window; but it's a very fair case—a very fair case, indeed."

"Do you mean that the patient is in a fair way to recover?" inquired Mr. Pickwick.

"No," replied Hopkins, carelessly, "no, I should rather say he wouldn't. There must be a splendid operation, though, tomorrow, if Slasher does it."

"You consider Mr. Slasher a good operator?" asked Mr. Pickwick.

"Best alive!" replied Hopkins. "Took a boy's leg out of the socket last week—boy ate five apples and a gingerbread cake—exactly two minutes after it was all over boy said he would n't lie there to be made game of, and he'd tell his mother if they didn't begin."

"Dear me!" said Mr. Pickwick, astonished.

"Pooh, that's nothing, that ain't," said Jack Hopkins. "Is it, Bob?"

"Nothing at all," replied Mr. Bob Sawyer.

This dialog, of course, like the rest of the book, is in the nature of a caricature; yet it fairly represents the attitude of the

profession and the public, respectively, of that day, upon the subject of surgical operations—the former assuming a careless familiarity with the terrors of the knife (which, however, were for the most part limited to an occasional "accident brought into the casualty ward"), the latter frankly ignorant and morbidly agape at those purposely embellished tales of what went on behind the veil, which the Jack Hopkinses and the Bob Sawyers were pleased to impart.

When a Surgical Operation Was a Thing Marveled At

No longer ago than the childhood of the present writer (whose hair is by no means gray yet) the occurrence of a surgical operation was a comparatively rare and notable event in the circle of one's acquaintance—an event which singled out the family experiencing it for a certain solemn distinction that lasted until another similarly afflicted family attracted similar notice to itself. It produced much the same kind of sensation, differing only in degree, as a death in the community—in which, indeed, it not infrequently terminated. One spoke of it, and of the family in which it occurred, with bated breath.

If the patient were fortunate enough to survive the operation, he or she was ever afterward regarded as a sort of revisitant from the tomb; and it must be confessed that the rarity of such survivals and recoveries justified the feeling.

Mais nous avons changé tout cela. Nowadays there is scarcely a family, either in city or country, that does not boast one or more members who have been "on the table." Indeed, the civilized human race may be divided into three comprehensive classes: those who have undergone a surgical operation, those who are at any given moment undergoing one (a class whose numbers would make an interesting calculation for the ubiquitous statistician), and those who will undergo one.

The word "boast" is used advisedly. It seems to constitute a point of individual, but more especially of family, pride; almost to establish a kind of order-patent, except, perhaps, that it has of late become somewhat too common an experience. One's next-door neighbor, one's seat-companion in the street-car, one's associate in business, the men and women who jostle us in every walk of life, are more than likely to be minus some part of their anatomy—some important part, too—yet they are much more calmly unconcerned than they would be if their necktie were disarranged or their back hair coming down.

A Familiarity Which Means Loss of Mystery

It is no longer the surgeon, or even the medical student, that holds forth with careless familiarity on the details of the operating room; nor could he find a credulous, gaping audience if he did. Miladi recounts the harrowing particulars of "her operation," in her most bored drawl, to her equally languid shopping friend, over a cup of bouillon. Young girls glibly tell their surgical experiences to each other, and even to young men acquaintances, on the street-car, hardly thinking it worth while to stop reading their book or munching their chocolates to do so. Men speak of their visits to the surgeon and what he did to them in the same brief, matter-of-fact way in which they speak of a drop in the stock market, and with far less emotion. In fine,

this matter of surgical operations, from the standpoint of the public, has come to be a matter of joking—a last, infallible sign that it has lost its air of mystery and horror.

Yet, in spite of all this, the individual, personal dread of the knife remains just as keen today as it ever was. Nobody, it will be noticed, is nearly so garrulous or complacent about the operation he is going to undergo as about the one he has undergone; nor, so far as can be learned, has anyone been known deliberately to court the knife as a means of acquiring that distinction which it is afterward used to confer. Talk "knife" to the patient, and he or she still shrinks and winces, and usually goes a long way around in a desperate attempt to evade it. Not infrequently, by the way, in this dallying for time the auspicious moment passes, and surgery's opportunity passes with it; such is the story of many an "unsuccessful operation." But that is not the point just now. The point is that the commonness of and familiarity with surgery has not really softened the glitter of the surgeon's knife or robbed the operating table of its personal terror.

It speaks volumes for the achievements of surgery that, in the face of this personal horror of the knife and without materially modifying it, she has been able to persuade the public to accept her measures as current medical coin. Certainly nothing but an overwhelming show of results could have prevailed against such a universal and deep-rooted abhorrence, and have induced men and women, and even children, to submit as a matter of course to that from which they instinctively shrink.

If there are some of us who recall the days when a surgical operation among our acquaintances was something of a rarity, we can also remember that in those days there were quite frequent deaths from obscure causes that nobody seemed to be able definitely to diagnose. Who of us does not recall the legion of obscure intestinal troubles which went under the blanket name of "inflammation of the bowels," and which usually resulted in the patient losing a name altogether and being put

under a sheet; the equally vague ailments of the digestive tract which, for want of better knowledge, we called "gastric fevers" and made daily guesses as to how long the victim could hold out? Most of these have, in these latter days, been intelligently resolved into their proper causes, and in most cases promptly relieved by a surgical operation.

The Achievements of Surgery

Merely to catalog the achievements of surgery during the past twenty years or so would take more space than this article can claim, to say nothing of describing them in detail. There is, in fact, scarcely a class of ailments in which surgery has not taken a hand—and, it must be admitted, usually an effective hand. Even in those diseases which seem most peculiarly the concern of the internist, surgery has intervened and lowered the percentage of mortality.

But in its own domain, of course, the triumphs of surgery have been most marked. The wonderful story of modern surgery, properly written, would read like a romance; or rather let us say like an extravaganza. What Arabian Nights *génie* can compare with the man in the white gown who, with a few passes of his magic knife, as it were, and a few plies of his golden thread (only in this case it is catgut), removes a diseased and useless stomach and short-circuits it to the small bowel, not only without impairing, but by so doing actually improving, digestion? Of course the job is not really quite so instantaneous and simple as that—although, thanks to the ether, it is even more so to the patient—but in effect that is just what the modern surgeon is doing every day. What fanciful transmogrification equals the splitting and transplanting of nerves in paralytic patients, whereby the nerve-currents are made to "cross," as we say of the telephone, and supply parts of the body for which nature never intended them, restoring motion and sensation to otherwise helpless limbs and organs?

Suppose, instead of this rather idealistic aspect of the subject, we view it from a more matter-of-fact, workaday angle. Step into a surgical clinic and watch this modern

magician in action in his ordinary daily routine. Here is a patient afflicted with gallstones. Medicine has failed to do him any good; he has suffered many things of many physicians and grown worse rather than better. A little ether, half an hour's quiet, intelligent work with the knife, and the gallstones (often several hundred in number) lie in the surgeon's hand, and later in the museum jar, where they will never trouble the patient again.

Next comes a patient with an abscess of the lung, due, perhaps, to some old pneumonia or to tuberculosis. Time was when the surgeon dared not go into the lung cavity for fear of collapse, for the air pressure inside and outside the chest is different; but modern ingenuity has devised an exhaust chamber which enables the operator to work in the proper density of air, and so this lung is safely and efficiently drained and made to heal.

Then follows a child with "bow leg" so marked that, as the old saying goes, "a pig could run between his legs." A nicely calculated chiseling of the distorted bones, and the deformity is not only corrected but forever prevented from returning; for the mechanics of the operation are such as to compel the bones thereafter to grow straight and true.

So they come—and our modern Magus tackles them all, with endless resourcefulness and unflinching skill; and the scalpel, in his beneficent hand, becomes a veritable magic wand of deliverance from the black enchantment of disease and deformity, often of death itself.

The Transplantation of Organs

The end is not yet. Surgery is still busy achieving more and more wonderful feats of almost incredible legerdemain. Last fall, in Philadelphia, there was held an annual Congress of Surgery, at which were represented some of the marvelous achievements that the current year had brought forth. One surgical wizard (he is nothing less), Alex. Carrel by name—of the Rockefeller Institute—showed to this Congress a dog, two years after both kidneys were removed and replaced by others taken from other dogs—alive and as active as any

normal dog! The possibilities opened up by such a procedure are almost incredible. A man's kidney is hopelessly diseased; a healthy human kidney is secured from a man just killed, or dead from something not injurious to the kidney, and transplantation made—and lo, the sick man is promptly cured! It only remains to be demonstrated that a calf's kidney, or a sheep's, may be transplanted into man and fulfil all the functions of the human organ. One surgeon, during the Congress, did actually transplant another organ, not quite so vital as the kidney, from a sheep into a man, to replace a tuberculous organ that had been removed, and it attached itself perfectly.

Nor is even this the full extent of this transplantation marvel. It is not even necessary to make the transplantation immediately from body to body. If the healthy extirpated organ or tissue be preserved in perfect asepsis and at a proper temperature, it may be kept for thirty or even sixty days, in "cold storage," before being transplanted. A knee-joint, for example, removed for a crushing of the upper thigh may be preserved for a month or two and then substituted for a tuberculous or otherwise useless knee-joint, and a perfect knee secured. If the bones and ligaments and blood-vessels be accurately united, the preserved tissues "come to life" and functionate!

Mention was made a few minutes ago of the danger attending operations on the chest cavity, because of the air-pressure conditions. A New York surgeon named Elsberg has recently invented a comparatively simple instrument by which ether may be administered and at the same time just sufficient air mixed with the ether exactly to counteract atmospheric pressure. By a bellows or motor, the pressure on the mercury manometer is kept at the right pressure, so that the chest may be opened and the lung operated on without fear of collapse during the most prolonged manipulation.

One of the most interesting things performed at this Congress was an operation for the relief of pain due to a cancer that could not be operated on. The roots of

the sensory nerves going from the affected part to the spinal cord were exposed and these roots divided. There was perfect relief from the excruciating pain, and it will continue to the end of life; and thus the last days of this unhappy patient are made not only endurable but actually comfortable and painless, without in any way interfering with the rest of his functions.

Surgical Infatuation—Medical Indifference

It is hardly to be wondered at that there should have grown up, even among the laity, a regard almost amounting to infatuation for surgery, and a corresponding indifference almost amounting to skepticism for internal medicine. The spirit of the times demands specialism—which means exactness. Surgery has lived up to this demand. Asked to outline the treatment of a case, the surgeon promptly and crisply maps out a well-defined course with the confidence of a man who knows whereof he speaks, by which he expects to obtain equally well-defined results. The internist, under a similar inquiry, too often seems to be at sea, proceeds to darken counsel with words, and offers as his advice the same kind of stuff that he frequently gives as his medicinal treatment—high-sounding placeboes.

Even to the patient this difference is plain. Prone as he is to shrink and shudder at the cold-blooded advice of the surgeon, and at the harrowing details of what is proposed to be done to him (harrowing to the patient, no matter how the surgeon may soften them), there is, nevertheless, a certain confidence and hopefulness inspired in his demoralized mind by the certainty and exactness with which the surgeon talks. He feels that here is a man who knows his way and to whom he can entrust himself even through the dark valley of chloroform and dissection.

With the average physician, on the contrary, there is a vagueness of soft-speaking which, while it soothes the childish panic which is in every sick person's breast, as who would say, "Well, well, we'll see to that," yet leaves an equally vague uneasiness in the patient's maturer mind, he feels somehow that he must not ask the doctor

for more accurate details of how it is to be "seen to," and that he would not get them if he did. It is little wonder that, in spite of all the dread the surgeon's knife has inspired in the public mind, medicine has its thousands and surgery its tens of thousands.

Of all things, all qualities that the twentieth-century world demands in its workmen, clearness of knowledge and accuracy of workmanship are paramount. The world of today has no use for the man who *does not know*. Indeed, if one reads history aright, it never had. But today the facilities for knowing are so great and the average grade of knowledge so high that one has to know pretty clearly and to act pretty directly to measure up to the standard.

The day of the old shotgun is past; it is the age of the sighted, sharpshooting rifle.

Men are no longer taught to discharge a handful of grapeshot at nothing and nobody in particular, but to fire a bullet at a very definite and carefully chosen bulls'eye. There's the crux. The surgeon has armed himself in every direction with a modern, smokeless, four-mile Krag-Jorgensen rifle, and has taken target practice, while the internist is, or seems to be, to a large extent still blazing away with a blunderbuss. That is the real reason for the present-day reign of the knife. When the medicine-man knows his own mind and his own business as clearly and decidedly as the surgeon knows his, and uses rifle and bullets instead of shotgun and grape, then he will not only hold his own against the surgeon, but will go a long way toward wiping surgery, or at least a good portion of surgery, off the map.

The Individual Treatment of the Insane

By PAUL E. BOWERS, M. D., Michigan City, Indiana

Physician in Charge State Hospital for Criminal Insane

THE time was when the poorly qualified practitioner, to escape from the trials and problems that beset him in private practice, abandoned his post as a healer in the public community and sought rest and a livelihood in the hospitals for the insane.

Here, in the capacity as physician to the insane, he was a worse menace to the public welfare and to the high standing of the profession than he was outside of the institution, where the law of the survival of the fittest is eternally enforced.

This type of physician who sought retreat in our public institutions was a stumbling block that so long prevented the development of that great branch of medical science, psychiatry. This field of preventive medicine is indeed a broad one and is rapidly attracting able students in large numbers. It is truly a many-sided question. It embraces medicine, sociology, social economy and state legislation. It also has its humanistic aspect, a recognition of which is of prime importance. In-

determinable amounts of time have been spent in studying a diseased heart or kidney, while the mind has been almost neglected; yet, after all, the object of life is a contented and peaceful frame of mind.

Our psychopathic hospitals should no longer be merely corrals where those suffering from mental disorder are housed and fed, but they should be centers of medical and psychological research in the truest sense of the word. The unfortunate inmate of such an institution should have individualized treatment by well-qualified men.

The system of personal treatment of the insane can be divided into two great classes, namely: the physical and the mental.

The Physical Side of Treating the Mentally Deranged

The physical examination should be in minute detail, for it is of the utmost importance; if neglected, the very key to the mental situation may be overlooked. All physical defects should be sought for and,

if possible, corrected; any lesions of the viscera found should be remedied.

Diseased and imperfect teeth should be treated by a properly qualified dentist; the obscure and impacted molar, which is frequently the hidden source of mental alienation, should be sought for and relief afforded. Defective vision and audition should receive medical attention. In the female pelvis, many times, we find factors that predispose to insanity, such as extensive adhesions, pus-tubes, displaced and diseased uteri and ovaries; if any such defects are found they should be ameliorated. Circumcision should be performed on the highly erotic and unstable youth whose thoughts and actions are centered about his sexual organs by an excessively long prepuce and the highly irritating smegma which may lie beneath it. This line of procedure many times is applicable to the female patient. The adherent hood covering the clitoris should be separated from that organ, so that the genitalia may be easily and frequently cleansed, thereby eliminating a vast source of irritation leading to sexual excesses and perversions.

The great factor of mental disease, syphilis, should be searched for in every possible manner. The Wassermann test and cytologic examinations should be resorted to in every case where luetic taint is suspected or organic disease of the brain is present. All chronic diseases, whether organic or functional, should be persistently and accurately treated.

Hydrotherapy should be employed in certain cases where it is required; but not as I have seen it in many institutions, where herds of patients, screaming, chattering, and fighting, are driven indiscriminately to the bathrooms to receive this treatment. Hydrotherapy and hot-packs should never, under any circumstances, be given without careful examination of the heart and the blood pressure. Patients undergoing this sort of treatment should be constantly watched by trained attendants, who should ever be on the lookout for fluctuations of the circulatory and respiratory rates; alternate flushing and pallor of the skin and any other signs of syncope which may present themselves.

Following the completion of this line of treatment, patients should be put to bed for a few hours and every precaution taken to prevent sudden cooling and exposure to drafts.

As to the discussion of further physical needs, we might dwell upon them indefinitely if space permitted.

The Psychic Aspect of the Treatment

At this point I wish to say that there has been a great change in our conception of psychiatry in recent years, and the necessity for individual psychoanalysis is deemed far more important than the mere tacking of picture-frame diagnoses about specific groups of symptoms, which are one thing today and totally different six months hence.

We should get away from the pernicious habit of attempting to name and to classify all mental troubles at the expense of the real facts of our cases. We must seek to learn the personality of our patients. We shall learn more of the abnormal if we will first acquaint ourselves with the normal condition of mind. The mere etiologic and pathologic labeling is of little value; for insanity is not really a disease-entity, but it is a type of symptomatic reaction of mind itself to external influences.

The following are two excellent examples that compel us to admit that the greatest importance in the rational treatment of mental disease is the study of the individual mental make-up.

The abuse of alcohol, as we know, in one person produces delirium tremens; in another, acute alcoholic hallucinosis; and in a third, Korsakow's psychosis. Here the etiologic factor is the same, but the types of reaction are different. The causes of these differences lie in the personal organization.

Another striking illustration demonstrating the same principle is the one furnished us by our old-time enemy, syphilis. One person affected with lues develops paresis; another, cerebral syphilis; and still another, locomotor ataxia.

Here again the three-fold diversity of the resulting diseases from syphilis owes its origin to the peculiar structure of the person affected.

Human nature can not be made to fit into a formula; neither can the symptoms of disease.

The soul of our mentally unbalanced patient is still human; his desires and longings are still active; and only the methods which are used to obtain the desired end—happiness and peace of mind—are ill adjusted and poorly directed.

The patients of a psychopathic hospital should be kept employed, and the nature of their work should be psychologically determined to meet their individual needs. The submerged and painful complexes should be dislodged from their hiding places by free and limited word-association tests (of Freud) or by any other agencies that are within reach of the alienist.

The physician's attitude should be friendly at all times, even under the most trying circumstances; his manners and methods should be so adroit and full of honest purpose that the patient's entire confidence may be gained. The petty trifles which appear as mountains of trouble on the clouded horizon of those mentally sick should never be disregarded or ignored.

Only by following these apparently insignificant trifles, which are in reality psychic landmarks, can we gain access to his world of thought and action. By this means we are able, many times, to discover the mechanism of our patient's mental distress and thereby secure his cooperation in meeting the problem in an efficient way.

Medical Photography

How the Physician May Apply the Photographic Art to His Work

By MALCOLM DEAN MILLER, M. D., Brookline, Massachusetts

Associate Editor of "American Photography"

EDITORIAL NOTE.—Dr. Miller is, not only an able practitioner (an enthusiastic active-principle man, by the way), but he is a skilful photographer and a voluminous writer upon photography. We feel sure that thousands of readers of "CLINICAL MEDICINE" will enjoy and profit by this paper, which is concluded in this issue.

II

Taking General Case Photographs

THE cases which most of us general practitioners are likely to meet with in our own practice, and suitable for a pictorial record, may cover almost anything from anemia to zymotic diseases. Here the object is merely to get an accurate detailed picture of the patient as a whole, and so the patient must be placed in rather a flat lighting and taken with as full-time an exposure as can be given without danger of movement on his part. Such records, if the patient is ambulatory, may be made at the office, where conditions may be adapted to the work.

For daylight, it is best to seat the subject whenever possible, because of the greater steadiness with which he can hold his pose. If a full-length picture is required, it is advisable to provide a chair or a table

to steady himself against, these accessories being painted out on the negatives afterwards, if desired, with opaque water-color. Some form of background is almost a necessity and may most conveniently be a plain gray blanket hung against the wall or draped foldlessly over a screen. It should generally be about four feet behind the sitter, whose shadow should not fall on it.

In arranging the lighting, it is important to avoid deep shadows on face or figure. The color of the skin must be plainly seen in the most strongly illuminated as well as in the most shaded parts. If the shadows seem rather strong, they must be lighted by reflection from a white sheet thrown over a screen or hung on the wall so as to throw light upon the shaded portions. Of course, the working distance must be determined by the size of the room, but for head and shoulder views it is best not to work closer

BACKGROUND
 **SUBJECT**
CAMERA 

WINDOW

Diagram A

than seven and a half feet from the face in order to get correct proportions and full exposure. A six-inch lens at this distance gives a small head, to be sure; still, if focused perfectly sharp, it can be enlarged enough to fill an 8×10 plate, if necessary, without losing anything, whereas, if one works closer, there is a loss in depth of focus, double the exposure is needed, and there is almost sure to be distortion or blurring.


The distance of the patient from the window is important. If he is placed too near, the lighting will be harsh, with inky shadows and chalky high-lights. At double the distance the light is diffused, the shadows become less dense, and the exposure required is considerably shorter. If the camera is put opposite one window-casing and the patient opposite that of the other side of the same window and facing the camera, with the light falling almost full on his face, the arrangement will be found good. See diagram A. The same lighting may be made by flashlight, by holding the lamp a foot or two to

one side of the camera and about a foot above the patient's head.

There are many general cases in which it is desired to show some pathological departure from the surface anatomy. In most of these, the necessary pose has to be selected to bring out the point chosen, and the camera and accessories have then to be arranged to take it in just that one way. Here we must avail ourselves of an oblique lighting, which will give relief to the parts by modeling them with shadow.

On general principles, the direction of the light should be at an angle of 45 degrees, just as in classic art. Care must be taken, however, to avoid harshness, to give full-time exposure, and to avoid overdevelopment of the negative. The problem is less

photographic than medical. If you can see exactly what you wish to show, it is simple enough to make the picture—provided you use a suitable background and can secure a sufficiently long exposure before the subject moves. Diagram B represents a scheme of lighting to get the 45-degree incidence at an ordinary window. In this case it is necessary to cover the lower part

BACKGROUND
REFLECTOR
 **SUBJECT**
CAMERA 

WINDOW

Diagram B

with an opaque cloth as high up as the subject's head, so that the light will come from above; it is also almost always necessary to use a reflector, remembering that the angle of incidence is equal to the angle of refraction.

Details must be handled on these same principles, but the scale must, of course, be



SUPERNUMERARY TOE

Snapshot at $\frac{1}{2}$ second in sunlight at $f:8$ on plain plate near window. 11-inch Cooke lens used.

larger. This means that the lens has to be brought closer to the subject and the exposure correspondingly increased. The allowance that is to be made is given in the instructions for the Beometer, under the head of "Copying." In almost every instance it will be found easier as well as better to accept a small, sharp image, which can be made quickly with a large lens-aperture, than to work close, stop down the lens, and then lose the plate through the patient's moving during the necessarily long exposure.

The medical photographer who is wise will practise first in his office and depend wholly on the exposure-meter; but, if he is unusually blessed with sagacity, he will master the flashlamp and use it whenever possible.

I know of nothing in the whole field so difficult as taking case photographs in private homes or hospitals. The conditions, for daylight-work, at least, are often almost impossible to control successfully. One has to work fast, improvise background and

reflector, arrange the lighting as well as possible (usually it is not possible to get it quite as one wishes it), expose at least two plates on every position desired; and then, as often as not, lose most of them. Sometimes there is not room enough to work in even with a 6-inch lens; sometimes the patient is cranky and moves on purpose; sometimes the wrong exposure must be given.

But the flashlamp solves half the troublesome problem by putting into your hands the control of the light, both as to quantity and direction. With flashlight, the subject may be left in any place and yet lighted as you desire. The lens may be stopped down to get depth of definition and the exposure regulated by increasing the weight of flashpowder. Whenever it is possible to use it, I certainly recommend flashlight in preference to daylight.

Photographing the Skin

The problems confronting us in skin-cases are particularly difficult: first, because the lesions are so small; secondly, because of the question of rendering colors correctly; thirdly, because the slightest



PICTURE OF A MONSTER

Picture made at an undertaker's shop, one hour before burial. String around neck, to support body. 4 x 5 Korona camera, 6-inch Cooke lens; central plate; timed by meter about one-half minute at $f:16$, with lens three feet from subject; camera balanced on a box.

movement ruins the picture. One of my illustrations shows a simple skin affection where merely a topographic view was desired. It was made with as brilliant and as flat a lighting as could be secured, with an exposure of about 2 seconds, and it was one of three successes out of a dozen plates.

Daylight must be used, as a general thing, so Diagram A applies for most cases, unless it is possible to arrange to pose the subject



ANOTHER VIEW OF THE MONSTER
Showing arrangement of boxes and towels.

outdoors in the shade. The window must be wide open and covered with cheese-cloth, to diffuse the light. Having got all the illumination possible, use a reflector to light up the shadows, then give a full-time exposure. As previously stated, the best plate to use is the Spectrum brand, coupled with the Isos III filter; if, however, the exposure needed would be several seconds with this combination, dispense with the filter, or even use the faster double-coated ortho plate. In case of doubt, give half the full meter-time with as flat a lighting as possible.

Almost always it is necessary to have the patient in a perfectly comfortable, relaxed pose, the body solidly supported, to prevent motion, while he should also hold his breath during the exposure.

As the filter always affects the focal length of the lens, it is necessary to focus with the filter in place, when this is to be used.

On all plates, except the Spectrum, red will photograph black. Without the filter, reds are likely to be somewhat under-

exposed if the other colors are fully timed; but, if exaggerated contrast is required, as, for example, between a patch of erythema and the normal skin, it is permissible to omit the filter and let the erythematous area come out darker than it actually looks to the eye.

Blues photograph darker on Spectrum and on ortho plates than they do on the ordinary brands, but, to secure the full depth, it is necessary to use a filter. To the eye, of course, dark-blue and purplish colors look much lower in tone than all others except the duller reds, so it is well to secure these relative values by using the Spectrum plate with the filter whenever possible.

A room into which sunlight comes is to be preferred, and if only a detail study of a part of the body is to be made, it is then possible to use the direct sunlight and cut the exposure down to a slow snapshot, say 1-5 of a second. In skin-work, however, it



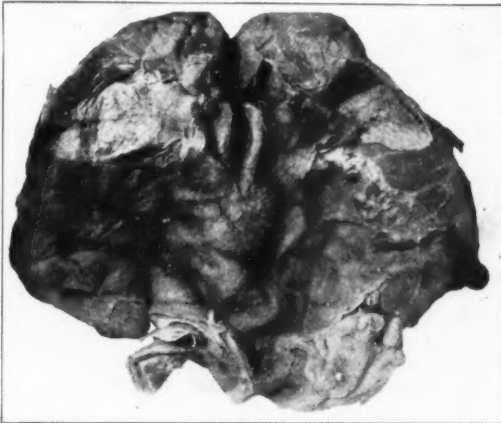
PHOTOGRAPH OF KIDNEY.

Picture made by the immersion method.

is usually important to record the topography of the lesion, hence it is not necessary to work very close to the subject. Such details as chancres and Hutchinsonian teeth, on the other hand, must be made as large as convenient if they are to retain any detail.

The general tone of the normal skin has a great deal of yellow in it, and this color records pretty well on either the ortho or the Spectrum plates. The important thing is to keep the negative soft by exposing

in front of a window. The tripod is then securely set up and locked into position with the Mellen tripod stay, while a tilting tripod head is arranged so that the camera points directly downward.



A PATHOLOGIC KIDNEY

Picture made by the immersion method. Note glass push-pins by which specimen was prevented from floating up.

fully and developing for only about 5-6 of the normal tank-time. This prevents the "plugging up" of the high-lights and halftones and allows all the detail visible in the negative to print out.

Sometimes only the topography of a skin-disease is required, so that the false rendering of color inherent in the plain bromide plates is not objectionable, and then the extra speed of the Sigma or the Wellington Extra Speedy will be found a great convenience.

Flashlight may, of course, be used for skin cases; but in this event the filter has usually to be dispensed with, because it is intended only for daylight, giving a false rendering with artificial illumination. The double-coated ortho plate is about 50 percent faster than a plain plate when exposed by flashlight.

Gross Specimens

Autopsy specimens and organs removed in operations are peculiarly difficult to deal with by ordinary methods. In the case of recent specimens, it is best to place them on the floor, with a white blotter or a piece of black velvet beneath them, and directly

Life-sized pictures are obtained if the distance from object to lens is equal to that from lens to ground-glass. To secure sharp focus, it is well to insert a thumb-tack having lettering stamped on the head and to get this perfectly sharp by using a focusing magnifier. Then stop down to about $f:22$ or $f:32$ and calculate the exposure by meter as directed for copying. Sheets of blotter or of white card should be set up against the tripod legs to reflect light into the shadows, thus carrying full detail in all parts. For such work the increase of exposure required by the filter is not objectionable.

In dealing with specimens which have been preserved (in Kaiserling's or some other fluid), a similar method should be followed; but immersion of



PHOTOGRAPH OF PROSTATE

Prostate from the same case that furnishes the pyelonephrotic kidney. Natural size. Photographed by immersion.

the organ in clear water or diluted alcohol is the easiest way to get absolutely satisfactory results. A battery-jar is convenient, as it allows the lighting

to be arranged perfectly. It is astonishing how effective immersion is in getting rid of all reflections. With a flat lighting, there will be no difficulty in photographing every bit of detail present in even the shiniest membranes, because the fluid prevents them from reflecting their shimmer to the lens. In no other way can such good results be obtained.

Finishing the Negative

After the negative is fixed, it is sometimes found too dense in the high-lights to print out all the detail visible by transmitted light.

An effective reducer which acts on the high-lights is acid permanganate. For instance:

Potassium permanganate grs. 15
Distilled water ozs. 32

Take of this solution enough to cover the plate and acidify it with C. P. sulphuric acid. The well-washed negative is immersed in this bath and rocked. Reduction is controlled by frequent examination and, when seen to be sufficient, is checked by bathing the plate in a mixture of

Sodium bisulphite lye drs. 2
Water ozs. 3

for about five minutes, after which the negative is washed in running water for about twenty minutes.

Overexposed negatives may require the removal of a part of the excessive shadow detail by means of Farmer's reducer. Take sufficient of plain 1 : 5 "hypo" solution to cover the plate and add to it enough of a saturated solution of potassium ferricyanide to color it to a medium straw-color. Bathe the plate, removing it frequently, but rinsing it under the faucet before holding it up to the light. The action is rapid and must not be allowed to go too far.

Twenty minutes of thorough washing will complete the process.

Sometimes reduction has to be followed by intensification with mercuric iodide in order to get enough contrast for a good print. This reagent can be purchased in tablet or powder form under many trade-names, being easily identified by the red crystals of the iodide mixed with sodium sulphite or by the pink color of the tablets. The solution may be prepared by adding a 10-percent solution of mercuric chloride to potassium iodide in solution and redissolving the precipitate of mercuric iodide forming by adding an excess of the potassium-iodide solution. It acts rapidly and can be used as soon as the plate is rinsed from the "hypo" bath. Often one minute is long enough to give plenty of intensification.

To insure permanence, it is well to blacken the negative with any used developer and wash it thoroughly.

The final steps in finishing the negative are, to spot out defects with a fine sable brush, and to paint out the background with red "opaque," if a perfectly white ground is desired.

Now regarding the illustrations accompanying this paper. I found, on going through my negatives, that I had very few suitable for my purpose. This is chiefly because most of my work has been done for other physicians, who took away the negatives. I have tried, however, to select examples of the different classes of work herein described and to supply data which may be of assistance to the reader.

Photography is a most absorbing recreation, and I am sure that the physician who takes it up as a means of recording his cases will not be content until he has mastered all difficulties and made it an accomplishment that will be of value to him in many ways other than those I have pointed out.



Boils, Carbuncles, and Felons

Their Treatment by Injection With Pure Carbolic Acid

By J. M. FRENCH, M. D., Milford, Massachusetts

EDITORIAL NOTE.—CLINICAL MEDICINE prides itself on supplying the doctor with a wealth of practical information of a character that is immediately available. Dr. French's article supplies help of this kind—help that can be coined into dollars. We urge every one of you to read it carefully.

SO far as I have been able to ascertain, the attention of the medical profession was first called to the remarkable virtues of pure carbolic acid, as a local application in burns, cuts, and all kinds of fresh wounds, and also as a hypodermic injection in boils, carbuncles, and other abscesses, by Dr. Ben H. Brodnax, of Brodnax, Louisiana—a man who, though he may have lacked the training of the schools, yet proved himself to be possessed of a quick eye, a clear head, and a true medical instinct.

It is to the second of the two classes of uses mentioned that I desire to call the attention of the readers of CLINICAL MEDICINE today. There is nothing original about what I have to say. I have simply followed along in the path which was marked out for me by such men as Brodnax, Albright, Robert Gray, and others. But the results obtained were so favorable that it seems worth while to call the attention of others to the same. Especially is this true because success with this method depends in great measure upon the technic employed; and it is the manner of procedure to which I wish to call special attention.

Probably there is no better way of doing this, than by describing the method which I have followed; and I will take as an example my own individual case, which was one of the first in which I put it in practice.

How I Managed My Own Carbuncle

Just before Christmas, in 1908, I found that my cheering holiday present was to be a fine, plump, lusty carbuncle, which had selected for situation the right side of my neck, just at the upper edge of the collar. Years

before, I had "enjoyed" several crops of boils on the back of my neck, but never before had been "blessed" with a real carbuncle. Of course, at the beginning I was not certain whether this would turn out a mere boil or a carbuncle. But it proved to be the latter, large and well-developed, standing out like an egg and having nine distinct openings.

As soon as I made up my mind as to the true nature of my acquisition, I picked up a tube of ethyl chloride and made a hurry call upon a brother physician, enlisting his services, with the hope of aborting the thing. First freezing the carbuncle with the spray of ethyl chloride, in order that the treatment might be painless (like most doctors, I was very anxious not to be hurt), the doctor proceeded to inject one drop of liquefied pure carbolic acid into the center of the swollen mass. Next day I decided that the dose was not sufficient and so had the process repeated in the manner as before, but this time injecting four and one-half drops.

This procedure did not succeed in aborting the carbuncle, as I had hoped, but it did produce some most remarkable results, the first of which being that the pain was almost entirely removed, and this never returning to any considerable extent. As I have said, I had previously had considerable experience with boils in my own person, and I never had or knew of a boil or carbuncle which was as nearly painless as this one. The phenol seemed to exert a marked anesthetic effect, and this was permanent.

The next effect of the phenol injections was to prevent the burrowing of the pus and the spreading of the inflammation. Instead, the tumor suppurated early, the

pus came to the surface readily, and was discharged without the use of a knife.

Although the carbuncle went through the regular course, this was much milder and shorter than is usual. I was, at the time, the attending physician at the Milford Hospital, and I was able to go on with my duties without interruption. I kept the sore covered with a thin paste of antiphlogistine, for protection and to avoid irritation.

The result in this instance was so favorable that I have depended upon this method ever since, and I have never been disappointed in it. To be sure, I do not claim that it will do everything, but only that it is better than any other method I have ever tried. When these phenol injections are made sufficiently early, no doubt many times carbuncles can be aborted entirely. But should you succeed in doing this, your ultrascientific neighbor will dispute your diagnosis and assure you that it was nothing but a pimple, at the worst.

The Technic

As to the technic, I will give you the description written by my friend Dr. A. J. Gallison, which seems to me very nearly perfect.

"Mr. R. came to my office on December 25 and showed me a circumscribed swelling on the back of his neck, which he said had been coming for two or three days. I diagnosed it as a carbuncle. As he had had several such before, the last about three years ago, he was very anxious to be relieved from the pain and discomfort of the thing. I told him I should inject something that would relieve him, perhaps cure.

"I procured the pure carbolic acid, put my syringe in hot water, and melted the acid in a spoon. I then froze the carbuncle with ethyl chloride, plunged the needle into the center of it, at right angles to the skin, for about three-fourths of an inch, and slowly injected three to five drops as I withdrew the needle. Mr. R. said it pained for just an instant when I first began to inject the carbolic acid; but in thirty seconds the pain was gone, and he

has had no pain and very little discomfort since. The carbuncle discharged in a few days and very soon healed.

"Since the carbuncle of December 25, three others have started on the back of his neck, all more than two inches from the first one. I treated each one with carbolic acid, the same as the first. Two of them healed up and stopped (aborted), the third ran a mild course and healed in a short time. The patient is very grateful for the relief from the pain and soreness, to say nothing of the saving of time and expense.

"I wish to emphasize the use of the local anesthetic previous to the injection; the use of crystals of pure carbolic acid, melted and used in a previously warmed hypodermic syringe; the direction of the needle as to the skin and the depth of the injection; the injection of the carbolic acid during the withdrawal of the needle; the rapid and permanent disappearance of all pain; and the shortening of the time of treatment."

Dr. Gallison's experience agrees very closely with my own, and his report seems to me a model of its kind. Any physician can carry out the method here described and secure the same results.

Remember that there are three things which seem to characterize this treatment. The first is the remarkable diminution of pain and discomfort—a point which will be appreciated to the full by all who have ever suffered from a carbuncle. The second is the shortening of the course of the trouble, sometimes amounting to aborting it, especially if treatment is undertaken early. The third is the doing away with all necessity for the use of the knife.

At a recent meeting of our society, the Thurber Medical Association, a prominent Boston surgeon, in the course of a very practical talk on "The Dressing of Wounds," declared that so strongly did he believe in excision as the only practical treatment for carbuncles that, when a patient would not consent to excision, he always refused to treat him. In the course of the discussion which followed, quite a number of our members advocated the treatment here recommended, quoting their own experience as arguments in its favor, and did so with such good effect

that at the close of the session the surgeon in question assured me that he would try the carbolic-acid injection in the next case of carbuncle which might come under his treatment.

Calcium Sulphide to Prevent Recurrences

I will add that in my own case, when the second carbuncle began to form (and it is the common experience that others do follow the first, unless some means is taken to prevent them) I immediately began the use of 1-grain tablets of calcium sulphide every one or two hours until the system was saturated, when the pimples dried up promptly. Dr. Abbott assures me that the use of the granules of 1-6 of a grain, taken every hour, is to be preferred to that of the 1-grain tablets, because of the better keeping qualities of the former; for as is known, calcium sulphide is a drug which will not retain its virtues except under the most careful method of preparation. So Dr. Abbott's advice is sound.

I have, since then, adopted the same method for the treatment of paronychia, or

felon, and with similar results, namely, that the pain was lessened and the course of the abscess shortened; also, that all deep burrowing was prevented. As a whole, however, the improvement was not quite as satisfactory as in the case of the boils and carbuncles.

Let me summarize and again emphasize the essential points in the treatment outlined. First, be sure to freeze the abscess—of whatever form it may be—in order that the phenol injection may be comparatively painless. Second, use the pure crystal carbolic acid, warmed to melt it, in a syringe kept warm while using. The object of this precaution is to secure the caustic effect of the phenol, and also to avoid the rapid absorption which would follow its use in a diluted form. Third, use a small, sharp needle, and inject boldly into the center of the abscess, deep down into the tissues. Fourth, inject the carbolic acid, to the amount of 3 to 5 drops, during the slow withdrawal of the needle. Follow this plan, and you will be sure always to get satisfactory results.

Sexual Impotence, and the Athlete

By WILLIAM J. ROBINSON, M. D., New York City

Editor of *The Critic and Guide*, and of *The American Journal of Urology*: Author of "Sexual Problems of Today," and of "Never-Told Tales."

IT is but natural that, when we see a ruddy, well-developed, well-nourished and thoroughly healthy-looking individual, we should think of him as healthy in every respect. It is but natural that, when we see a six-footer with splendidly developed biceps-muscles, who is an all-around athlete, we should think of him as possessed of a powerful sexuality. It is natural that baseball players and prize fighters and policemen and military men should make a fanciful appeal to the imagination of the feminine half of mankind. But, cruel as it may be to do so, the illusion must be destroyed. A powerful athlete is not necessarily sexually powerful or even sexually normal. Just as a man may be in most excellent general health and still

suffer with weak eye-sight or poor hearing, so a strong, well-nourished athlete may be sexually very weak or even absolutely impotent.

I have seen so many athletes who suffered with one form or another of sexual weakness that I began to question whether there was not some causal relationship between the physical exercise and the impotence. This may seem a very revolutionary notion—that physical exercise and training should be productive of sexual weakness. But it is not so revolutionary at all—for please remember that more than two thousand years ago the ancient Greeks, who were certainly acute observers, used to say that all professional athletes were sexually impotent!

This is a subject very well worth investigating and discussing—particularly investigating. And I should be pleased to have physicians who have come across cases of sexual impotence or sexual weakness in athletes give me brief reports of their cases. But an important point is to be borne in mind. We must carefully distinguish between real sexual weakness and a sexual weakness which has supervened as a *result of sexual excesses*. For these cases belong to two entirely different categories.

If a strong, healthy, athletic fellow, endowed with a very strong sexuality, indulged daily one or more times for several years and has become impotent, then it isn't his athletics that is to blame for his weakness, but his excesses.

The kind of cases I have reference to are illustrated by the following brief reports:

Case 1. A. A., 28 years old. Was always fond of sports and athletics. Splendidly developed. All organs and functions in perfect condition. Formerly a leader and instructor in the Y. M. C. A. gymnasium. Married six months. Masturbated but very little at the age of 15, but, having learned of the sinfulness of the habit, gave it up entirely. Had pollutions about once a month or once in two months. Had occasional sinful desires, but would overcome them by brisk long walks or violent exercise. Gradually his will became so strong that it became easier and easier for him to repress his desires. On his wedding night, he discovered, what he never thought of suspecting, that he was impotent. Libido is present, erection comes readily, but is weak and subsides almost immediately; ejaculation takes place before *immissio* is accomplished. His wife is still a virgin. While this condition worries and humiliates him, his general health continues as good as ever. [In this case a complete cure was effected. For treatment see succeeding articles.]

Case 2. A. B., 30 years old. Policeman. The pride of the squad. Six feet, 4 inches tall, splendid specimen of animal manhood. Muscle plus, brains minus. Appetite enormous; bowels always regular; never sick a day. Libido practically absent—so far as

he is concerned, wouldn't care if he never went near a woman. But he sometimes yields to the temptations of sirens on the beat or to the taunts of friends, and then he finds that it takes him very long to get an erection. Orgasm very weak and devoid of voluptuous sensation. Takes the thing good naturedly, and would not come for treatment if he had not made up his mind that it was time for him to get married.

Case 3. A. C., 29 years old. Expressman. Powerfully built. Healthy in every respect. Drinks and smokes moderately. Can lift heavier trunks and do more work than any of his companions. Has never had intercourse. Tried it three times, but each time the attempt ended in a fiasco. Twice he had an erection, with, however, almost immediate ejaculation; the third time all efforts to induce an erection proved futile.

Case 4. A. D., 35 years old. Physician. No healthier and prettier disciple of Aesculapius ever takes part in the discussions at the meetings of the American Medical Association. Feels healthy in every respect—has always participated in games and sports. Condition: Libido very weak (exclusively mental) and absolute *impotentia erigendi*.

Case 5. A. E. Cousin of patient in case 4 above. Civil engineer. All-round athlete and thorough horseman. Condition same as in previous case.

Here we have cases from different stations in life which well illustrate the coexistence of sexual weakness with perfect physical health, nay, with a thorough, athletic, above the normal development of the body. *Per contra*, we often see poorly developed weaklings, suffering with various diseases, who are very powerful sexually, both so far as libido and potentia are concerned.

It is well to bear in mind that the sexual function is a function *per se*, having its own centers in the brain and the medulla, and its strength or weakness is not necessarily related to or dependent upon the strength and weakness of the body in general, and a splendid specimen of humanity may be, and frequently is, a pitiable failure *in rebus sexualibus*.

The Therapeutics of Copper*

By G. WYCKOFF CUMMINS, Ph. D., M. D., Belvidere, New Jersey

EDITORIAL NOTE.—This is an exceedingly important paper regarding a remedy that has possibilities much greater than most of us imagine. It will repay careful study.

As a therapeutic agent, copper is not appreciated at its true worth as the most efficient remedy at our disposal for the treatment of a whole group of diseases, some of which occasionally give us much concern.

Copper owes its desirability as a medicinal agent to a remarkable selective action. It is highly poisonous to the lower forms of plant-life, while having very few undesirable effects upon the higher forms either of plant- or of animal-life. For this reason, the famous Bordeaux mixture (a copper preparation) is the most efficient remedy for the various leaf-blights, leaf-spots, and mildews that affect potatoes, tomatoes, strawberries, and other plants. It kills the parasitic fungus without injuring the host. This is also why copper sulphate is used (in a dilution of 1 : 50,000,000) to kill the algæ that foul our beds of water-cress, and (in a dilution of 1 : 5,000,000) to kill those algæ that render unfit for use the water of reservoirs and ponds.

Value of Copper in Intestinal Infections

When I was in the wire mills at Trenton, New Jersey, in the year 1889, I ran across the interesting observation that an epidemic of Asiatic cholera at Trenton, some years previously, had attacked all the employees of the mill, excepting those who worked in the cleaning room. No one had any acceptable explanation to offer for the escape of those men. There certainly was something about that one department that rendered those engaged there immune to Asiatic cholera.

The only chemical substances in this department that were not also found elsewhere in the mill were sulphuric acid, hydrogen gas, whitewash, and copper sulphate. I reasoned that what would cure or prevent Asiatic cholera might have a similar effect on typhoid fever, dysentery, cholera nostræ, cholera infantum, and

diarrhea. Throwing out of consideration the lime and hydrogen as possible curative agents, there were left the dilute sulphuric acid and the copper sulphate solution as the only possible causes of the immunity to Asiatic cholera.

For some years I was inclined to think that the sulphuric acid had a good deal to do with it; indeed, I still am of the opinion that sulphuric-acid lemonade is of great service in choleraic diseases, especially as a prophylactic.

When it came to a consideration of copper as the possible cause of immunity to cholera, I found no literature bearing on the subject, although copper arsenite had been used for some years in diarrheal diseases and copper sulphate had been recommended as an astringent in similar diseases, not as a specific, however. As to the arsenite, this compound contains too much arsenic to permit of the use of enough copper to produce its full beneficial effect without introducing an unnecessary danger in the treatment.

For some years I made use both of sulphuric-acid lemonade and of copper sulphate in the zymotic diseases of the intestines. I used the sulphate at the rate of 1 grain in twenty-four hours, given in about 20 doses. Later, I came to depend upon the copper sulphate almost entirely, given in conjunction with zinc sulphocarbolate. This made it desirable to have copper in the form of a sulphocarbolate also, and so I had made for me tablet-triturates containing 1 grain each of copper sulphocarbolate. These proved so satisfactory that all other salts of copper were soon discarded.

As a routine treatment, I now add one of the tablet-triturates of copper sulphocarbolate to a 4-ounce mixture and give a teaspoonful of this every hour—making 1-24 of a grain to a dose. The only limit to the amount that may be given is the occurrence of nausea, and this dosage approaches that limit especially with chil-

*Read before the Warren County (N. J.) Medical Society March 12, 1912.

dren. To a large man, I have given 2 grains per day without bad effects on the stomach, and I myself have frequently taken daily doses of 1 grain in solution as a prophylactic, while for seven years I have drunk, in the summer-time, almost exclusively water that has stood for several hours in a copper tank.

Copper Is Not Dangerously Poisonous

There need be no fear of poisonous effects from copper. In the first place, large doses of copper salts will not be retained; secondly, experiments on dogs have shown that even large doses produce no harmful effects. Most of the cases of poisoning by copper salts are attributable to the arsenic in the compound, this usually being *paris green*.

Contrary even to recent beliefs, there is no danger of a serious chronic copper poisoning to those who work in it and who daily ingest indefinite quantities of the metal or of its salts. Not a single authentic case of poisoning caused by the internal administration of copper can be adduced. The only poisonous effect I have ever seen attributable to copper was a pustular eruption from the external irritation of finely divided copper. This is frequently seen among workers in copper and appears especially around the privates.

Filehne asserts that the ingestion of copper in proteid combination would produce no poisonous effects, even if given to an adult to the extent of 7 1-2 grains of copper per day. Kobert has shown that an average man can take 1 grain of copper per day with safety. This is an amount far greater than would ever be needed to kill, for instance, the germs of typhoid fever, which are destroyed in less than four hours in a solution containing only 1 part of copper in 1 million parts, which is about 1 grain for 150 pounds. As copper begins to be excreted only at the end of thirty-six hours, it is seen that, when giving it at the rate of 1 grain a day, there is present in the body, after thirty-six hours, 1 part in about 700,000 parts, or far more than enough to render inert typhoid and colon bacilli.

Experiments made by Dr. Henry Kraemer, of Philadelphia, show that water in

contact with metallic copper absorbs copper quickly enough to kill typhoid and colon bacilli in less than four hours. The Chinese have, for many centuries, unknowingly utilized this principle in the purification of their drinking water. The water in China is very liable to be polluted, but a fixture of the Chinese household is the water-tank made of copper. It is said to be impossible to induce a native of China to part with his water-tank, as he claims it will bring bad luck, in the shape of sickness. In the light of the bactericidal powers of water contained in a copper tank, it can readily be seen whence the "bad luck" arises from water not first thus exposed to the action of their copper vessel.

Copper is a normal constituent of the human body to the extent of 40 or 50 parts in 1,000,000. Possibly our tolerance of it is due to our association with it for thousands of years, in the shape of copper, bronze, and brass cooking utensils, which necessarily yield considerable quantities of copper to the food prepared in them. But, alack and alas, in these latter days we get our copper in a can of peas, pickles or beans to which the wily manufacturer has added 3 grains of copper sulphate for the purpose of provoking our admiration of the life-like hue thus obtained.

Copper Sulphocarbolate Acts Marvelously in Choleraic Diseases

The effect of 1-24 grain per hour of copper sulphocarbolate on choleraic diseases is simply marvelous; all of the serious symptoms abate in a few hours; in cases that you feel sure are going to develop into typhoid fever, the patients are convalescent in a few days. Of course, you never know that these would go on to turn out typical typhoid fever, but a few statistics will render the supposition reasonable.

In my first ten years of practice in Belvidere, New Jersey, I had 26 cases of typhoid fever. In the next ten years, under the copper treatment of all diarrheas, I have had but 4 cases of typhoid fever, and of these, 3 had developed before the copper sulphocarbolate could be given. When using the copper, nothing else is given to control any diarrhea, directly, unless it

seems to be too debilitating. Then a little camphorated tincture of opium is added, and perhaps some cinnamon, as this seems to have a beneficial action directed especially to an inflamed colon.

I have prescribed copper sulphocarbolate (or, if you prefer, copper phenolsulphonate) more than 900 times in all forms of choleraic and diarrheal diseases with uniform success and satisfaction. Several cases of chronic diarrhea, of many years' duration, have yielded to it like magic. Many cases of intestinal autotoxemia have been bene-

fited by it, in conjunction with other remedies. The same may be said of fermentative indigestion.

I believe the greatest usefulness of copper sulphocarbolate lies in the prevention of all of the diseases named, the most important of which, with us, is, of course, typhoid fever. By disinfecting the typhoid-carrier, it ought to enable us eventually to get rid of the disease entirely. I am sure no physician will be disappointed in the use of copper sulphocarbolate in diarrheal and choleraic diseases.

The Vaginal Douche as a Therapeutic Agent

By H. O. WILLIAMS, M. D., Lansdale, Pennsylvania

HYDROTHERAPY, "or" the treatment of diseases by means of water applied in varied form and manner, has received, within the past decade or two, a mighty impulse at the hands of its champions. Handed down to us from the time of Hippocrates, in all ages it has been approved and used by practically all eminent physicians in some or many or all of its forms of application. The reason why it has not become, as yet, universal, is probably because, as an agent of cure or of prevention, it is so simple and so common that it is overlooked entirely by some or so very carelessly and improperly applied by others. In this short treatise we wish to present but one phase of this many-sided therapy by speaking briefly of its application in the form of the vaginal douche.

When we consider the vaginal tract from its anatomical and physiological points of view, with its folds and undulations favoring the lodging and decomposition of excretions and debris; with its multiplicity of glands dipping more or less deeply into its structure, offering an inviting location for germs to establish a home to procreate after their own kind; when we consider it as a canal of exit for the periodic discharge of the organs of repro-

duction or the discharge of the contents of a gravid uterus, and, at the same time, a canal of entrance for the conception just mentioned, or for germs, specific or non-specific—unwelcome, though, alas, very frequent visitors accompanying the spermatozoa on their mission or come from other sources—then we feel that this portion of the female anatomy deserves more than a passing notice; deserves more care than it usually receives; deserves, in fact, as much care as any of the many portions of the body and more than some. And, yet, downright neglect, perversity or undue or false modesty has brought into the lives of many women a condition which has saddened their existence, blighted their hopes, or led many a time to an untimely death; conditions which might have been avoided, beyond reasonable doubt, by judicious hygienic care or proper remedial measures.

We would, therefore, wish to consider the vaginal douche not only in the light of a curative agent but also as one of prevention; for prevention, or preventive medicine, is today becoming the strong arm in therapeutics, and it is becoming, more and more, the watchword of the physician of the twentieth century. However, the stage of prevention having been passed, when dis-

ease is present and invading, then the true physician will endeavor to use the best means at hand to eliminate, as best he can and quickly, all those morbid agents which have destroyed the equilibrium of the body.

Reasons for Resorting to the Vaginal Douche

In douching, therefore, or irrigating the vaginal tract, there is essentially a reason, and so we desire to enumerate briefly a few of these for consideration.

In the first place, it is frequently used for cleanliness alone, or probably there is present a leucorrhea or some other discharge that needs to be remedied. The surface of the vagina or of the cervix may be congested, inflamed or ulcerated and a soothing or antiseptic lavage may be needed to help its repair. Pain may be present because of a diseased state or from a dysmenorrhea which needs to be relieved. Uterine hemorrhages may have to be controlled or involution after labor hastened. Probably an operation has been deemed necessary in or around the vaginal tract, in which case thorough asepsis must be established if possible.

We have stated that the vaginal douche often is needed for the sake of cleanliness. We have also stated that the peculiar formation of the vaginal tract favors the retaining of secretions as well as the lodging and proliferation of germs. It is true that untampered with and uninvaded from without, the natural, normal, and healthy vagina seems to have been endowed by nature with power to take care of itself. However, it is just as true that an occasional lavage of this region by means of a properly given douche is not without merit, and, indeed, for sanitary reasons is positively needed.

Douching of the vagina will relieve the canal of any effete material, whether cast-off epithelial cells or glandular products or any remaining portions of the menstrual flow. At least, then, a weekly douche of plain sterile hot water should be administered, remembering in particular that it is especially called for or indicated just previous to and following the menstrual period. This, then, for the sake of

sanitation; for the sake of cleanliness. But this may serve a twofold purpose.

By this means lurking germs may be flushed away which, otherwise undisturbed, might set up a morbid process leading to disease and consequent ill health. Bearing this in mind it were well, then, to use an occasional douche possessing antiseptic properties, such as boric acid, 2 percent; carbolic acid, 1 percent; lysol, 1 percent; creolin, 1 percent, etc. Remember in particular that after douches containing carbolic acid, bichloride of mercury, or similar poisonous drugs, a douche of sterile water should be used as a matter of precaution. Nothing but good can result and, it may be, much harm averted, especially if used after a suspicion of a possible contagion.

Leucorrhea

When the physician is consulted by his female clientele in regard to any derangement of the genital tract, leucorrhea is by far the most common cause of their coming. Generally speaking, leucorrhea in their estimation is not regarded as a diseased state; is not looked upon as a symptom of some disorder. Whether this leucorrhea is irritating or corroding or wholly bland; whether it is offensive or odorless; whether it is white or creamy or almost any hue or color from green to brown or red, to them it means practically one and the same thing and is regarded more as an inconvenience than as a symptom of any pathological condition, present or developing.

So, to treat it successfully, it is necessary to know its cause. It is necessary to know if it is due to a simple congestion or inflammation of the vagina or cervix, or whether the irritation is deeper-seated, with ulcerations or erosions or affecting, at the same time, neighboring organs. It may be of gonorrheal or syphilitic origin, or from a chancroidal source. It may follow an abortion or a full-term parturition, or be present during the entire term of pregnancy. It may be due to injuries from external forces; from rape, excessive coition, or masturbation. It may be found in little girls, caused by worms or foreign bodies, etc.; or in aged women, and then

known as leucorrhea from senile vaginitis. It may accompany the malignant diseases of the vagina and uterus.

However, whatsoever causes may be responsible for the state of affairs present, lavage of the vagina is indicated for its best and proper care. The internal, or constitutional, treatment and the various local applications that may be required for the particular case in hand vary but do not concern us here. The douching or irrigation, however, which may be required and which does concern us must be varied to suit the case and the conditions present. We will briefly specify.

Detailed Suggestions for Treatment

When leucorrhea is present from a simple irritation or inflammation, frequent douching with plain hot sterile water, as hot as can be borne, often is sufficient to cause the trouble to disappear in a short time. When the inflammation has invaded more deeply, or when erosions or ulcerations are present, then astringent solutions must be used. When local applications are required, these astringent douches, besides being used at regular stated intervals, should also be applied or used immediately preceding the application. The best astringents seem to be tannic acid and alum, either to be used in the proportion of one tablespoonful to the quart of water. Or the same amount of alum to one quart of a one-percent solution of carbolic acid seems to be ideal. These douchings relieve the pain and tenderness present, reduce the inflammation, and, at the same time, hasten its absorption.

Leucorrhea arising from gonorrhea should be irrigated with germicidal solutions or solutions having more than ordinary cleansing properties: notably, mercuric chloride, 1 in 5000; carbolic acid, 1 percent; permanganate of potassium, 1 in 200; etc. After this procedure, ballooning the vagina (by obstructing the outflow) with solutions of such salts of silver as protargol or argyrol will give pleasing results.

Leucorrhea following abortion is generally of gonorrheal or syphilitic origin and the douches to be given are those just enumerated.

Leucorrhea during pregnancy or after parturition yields readily as a rule to the astringent solutions; if persistent, then the germicidal solutions may be more effective, since the persistency indicates most likely a gonorrheal or syphilitic origin.

Leucorrhea traced to masturbation, excessive coition, etc., responds readily to simple hot cleansing solutions when the cause is removed.

In little girls, when worms are the known exciting cause, irrigating the vagina with hot boric-acid or salicylic-acid solutions (1 dram to the quart), with proper care of the rectum, will bring pleasing results.

When senile vaginitis is the cause, expect obstinacy and chronicity, but keep on persistently with the astringents.

When malignant conditions are present, we are not disappointed that palliation is our only reward from the douche. However, douching, particularly with carbolic solutions, hot as can be borne, often ensures a relief very grateful to the patient. It is indicated in all stages when there is a discharge, except in the very latest stages, when the procedure may be too painful to be borne.

Dysmenorrhea. Uterine Hemorrhage

Dysmenorrhea is a condition in which the douche has proved itself valuable. Here plain hot sterile water is used, or if some inflammatory condition is the cause or, in addition, present, then some of the previously mentioned solutions may be indicated. The object is, of course, in particular to relieve the pain, and in order to have this analgesic effect the water must be hot, not warm. Heated up to 110° F., if it can be borne, or, if possible, still higher, the injection, to insure the best result, must be retained for a period.

The best way to administer it is this: With the patient lying on her back and hips elevated, inject the hot solution into the vagina and, by holding the labia together, exit will be cut off and the fluid retained. This may probably be done in a more satisfactory manner, or at least more esthetically, by employing a syringe having a vulvar shield. This protects the vulva. Since the vulva is more sensitive to heat

than the vagina, therefore, by this method the water used may be heated to a higher degree than by the ordinary methods.

Lacerations, Bruises

Hemorrhages from the genital tract are generally uterine in origin unless they be of accidental causes. Treatment for these hemorrhages, therefore, is naturally directed toward their source. However, many uterine hemorrhages may readily be controlled, as bedside observations have often demonstrated, by the high vaginal douche. Water up to 115° or 120° F. directed forcibly against the cervix is generally all-sufficient. Undoubtedly, by impinging upon the cervix, this acts either in a reflex way, or, the os uteri being patulous, a portion of the stream enters the uterine cavity and applies itself directly to the bleeding points. Whichever it may be, the procedure makes it unnecessary to introduce the nozzle of the syringe within the uterine cavity.

Whenever any portion of our external body is bruised and battered or lacerated, hot cleansing baths and antiseptic solutions bring a refreshing relief when applied. After the average normal labor, to say nothing of dystotia, the vaginal canal presents this bruised and battered, and oft lacerated state. To let it religiously alone (we mean the vaginal canal, not the perineum) is the rule generally followed by many. This probably is the better course if, on the other hand, antiseptic measures are not just as religiously observed. But, observing all precautions, a hot douche of boric acid, mercuric chloride, or any approved antiseptic, creolin being a favorite, it will be found to be not only gratefully received by the patient, by relieving pain and tenderness, but also will aid resolution by helping to reduce the inflammatory state.

The all-important procedure of vaginal douching previous to any operative measure in and around this tract is done for and with the idea of prevention. Its needs and methods are so well known that we mention it only in passing to exemplify it as one of the various causes or reasons for douching the vagina.

Having enumerated various states or conditions in which the vaginal douche is indicated and has proved its therapeutic value both as a preventive and curative agent, it may now be appropriate to consider its mode of application.

Proper Manner of Giving Vaginal Douches

Simply injecting a small stream of water into the vagina, high or low, until the opposing walls of the tract resist the injecting force and then to trickle downward in the channel of least resistance, can hardly be called a successful application of the vaginal douche. True, a portion of the tract is cleansed or irrigated by this method, but it can scarcely be called a thorough application.

In order to secure the greatest benefit a copious supply of water, sufficient to fill the vagina, or to overfill it as it were, should be injected. Thus, by distending the canal and pressing out its folds, an easy means is attained whereby its entire surface as well as the glandular orifices may be lavaged, whether for cleanliness alone or for curative purposes. This distention may be secured by shutting off, from time to time, the outflow while continuing to inject; the most favorable position of the patient being, as known and as previously suggested, upon the back with hips elevated. With care and a proper syringe or apparatus this may be done, however, with the patient in almost any position; standing or sitting being the least desirable.

The manner in which the ordinary fountain-syringe is used by the average individual hardly meets the requirements of the ideal douche. The small stream enters and leaves the vagina with little or no distention and thus reaches only a portion of its surface. This may be greatly improved by instructing the patient to hold together the labia with the free hand while irrigating. Better still, secure a syringe having the necessary attachments that will govern this. One having a vulvar shield alone or combined with a return-flow apparatus will be found to give perfect control over the fluid used; the shield not only protecting the vulva from the heat but also

acting as a plug to retain the injected fluid for as long a period as may be desired.

In overdistending the vagina, we are warned of a possible patulous cervix. This condition is seldom present except during the last stages or near the termination of pregnancy, or as a result of pregnancy following a full-term parturition or of an abortion. However, a fluid entering a patulous cervix will likely return as it enters. Further, a clean sterile solution or a mild antiseptic fluid can scarcely be viewed as an agent of harm if it does enter. Some describe a mild shock resulting, but it is so seldom that it scarcely needs mention. Some persons, you know, have died from the effects of an anesthetic; therefore, draw your conclusions. Even from this occasional fatal effect, do we stop using anesthesia? If in douching we use the poisonous solutions, we should remember, the warning is: use them suffi-

ciently dilute and be sure to follow with a plain sterile hot-water douche.

By using, therefore, the proper solutions indicated, many of which could be enumerated (some of which have been named); by using them at the proper intervals prescribed, whether weekly or daily, or more often still, as the severity of the case calls for or the purpose of using requires; by using them in the proper manner so as to obtain the greatest possible benefits; and by using them in such sufficient quantities as the condition seems to indicate as necessary, whether it be quarts or gallons; it has been demonstrated over and over that the vaginal douche has been one of the greatest blessings to womankind in the preservation of the health, by relieving the body of pain and disease and the mind of anxiety, and thereby producing that sense of well-being that is so essential to the happiness of every woman.

An Appreciation of Mr. Bernard Shaw

By JAMES MOORES BALL, M. D., St. Louis, Missouri

Dean and Professor of Ophthalmology, the American Medical College (Medical Department of the National University of the Arts and Sciences)

The physician who will not stand up for his profession should join the submarine animals and become the head of a school of jelly-fish.

THE playwright is a privileged character: he can lie, he can steal the ideas of others, he can distort and misrepresent, satirize, ridicule, exaggerate, condone, or, in an extremity, he can even tell the truth, in part at least. Educated people accept the statements contained in a play with the same amount of sincerity as does the author—a sincerity which often is *nil*.

I am not displeased with "The Doctor's Dilemma." It is readable, amusing, and instructive. But I do object to the preface. To place an exaggerated, a ridiculous or an untrue statement or phrase in the lines spoken by an actor, is one thing; and is accepted by most people at its true value. But for the author of a play to preface his production with an elaborate essay filled with half-baked ideas and with downright falsehoods, is an entirely differ-

ent matter. Therefore, while granting to Mr. Shaw the greatest possible latitude in his lines, I shall take issue with the preface to his book.

At the outset, permit me to say that it is to be regretted that one cannot deal with Mr. Shaw as one would deal with a gentleman. But it is he who has placed himself beyond the pale. If my language seems to be harsh, do not blame me, but consider the offender.

Some of you may say: "We are discussing the play, not the preface." The two, however, are printed together; they are as inseparable as were the Siamese twins; but one is Hyde and the other is Jekyll.

While Mr. Bernard Shaw may be a perfect man physically, intellectually he is a monstrosity.

Although the calling of names and the placing of labels is not argument—yet I would epitomize my opinion of this man by saying that he is either: (1) an incurable

joker and satirist; (2) a literary anarchist; or, (3) the victim of a serious brain disease.

Mr. Shaw is as sublime in his egotism as he is superficial in his learning. Glittering generalities and sweeping statements flow from his pen with as much ease as water runs from the back of a duck. The result is that, consciously or unconsciously, he either tells falsehoods or he gives only half-truths.

There are many weak spots in his armor. Practically every paragraph in the 92 pages of preface of "The Doctor's Dilemma" contains an untruth. For example, he says: "Napoleon had no illusions about them [meaning the doctors], but he had to die under their treatment just as much as the most credulous ignoramus that ever paid sixpence for a bottle of strong medicine."

Evidently Mr. Shaw, although he does not specifically say so, would have the reader believe: (1) That Napoleon had no faith in doctors; and (2) that likely he was the victim of malpractice.

Now, let us analyze this sentence and give the facts.

Napoleon had no illusions about the doctors. And, yet, no ruler ever lived who had a higher appreciation of science and of scientific men than had Napoleon. Here is the proof: Did he not take with him, on his Egyptian expedition, the most learned men to be found in all France? And were not several physicians and surgeons included in this select corps of scientists? Did he not found, within the shadow of the pyramids, an Egyptian Institute which rivaled what the Alexandrian University had been in its palmy days?

Napoleon had no illusions about doctors! When the Empress Louise was in labor and Corvisart, the physician, said, "Sire, how shall I treat her?" the great Corsican replied, "Treat her as you would treat the wife of a peasant."

Corvisart seemed to be overwhelmed by his responsibility, but Napoleon knew that the mechanism of labor should be the same in the empress as in the fishwoman.

Napoleon's lack of illusions as regards doctors, and his appreciation of them and

of their work, is shown by Scarpa's experience. In 1783, Antonio Scarpa, one of the greatest of Italian anatomists and surgeons, was made professor of anatomy in the University of Pavia. When the Transpaduan Republic was proclaimed, in 1796, Scarpa refused to take the oath of allegiance, and he was obliged to resign his chair.

In 1805, when Napoleon was on his way to Milan to be crowned King of Italy; when, clad in their official robes, the university professors came out to do him homage on bended knees, Napoleon, casting his eagle eye over the assembled group, said, "Where is Scarpa?"

On being told that Scarpa would not take the oath, the Emperor exclaimed: "What do political opinions matter in such a case? Scarpa is an honor to the University and to my dominions, and I wish him to resume his place." Napoleon then appointed Scarpa his surgeon and conferred upon him the Cross of the Legion of Honor and the Order of the Iron Crown.

Many more facts could be cited to show the high regard which Napoleon had for members of the medical profession.

Our Sir Oracle says: "but he [Napoleon] had to die under their treatment just as much as the most credulous ignoramus that ever paid sixpence for a bottle of strong medicine."

What a wonderful sentence. "He had to die just as much . . ." How much can a man die, Mr. Shaw? Of course, Napoleon had to die—for he had a cancer of the stomach.

One more little phrase, and I am through with quotations from Mr. Shaw.

"Doctors," says Mr. Shaw, "are just like other Englishmen; most of them have no honor and no conscience."

Really, dont-cher-know, this is most unfortunate. Mr. Shaw seems to have cast his lot with the wrong kind of Englishmen, and I wonder whether ever he was "transported" for his literary crimes. My acquaintance with the English has led to a different opinion of them. Mr. Shaw uses too many words: "Most of them," he says, "have no honor and no conscience,"

just as if there could be honor without conscience.

Mr. Shaw's untruths, half-truths, and few facts, clothed in words, are fired at the reader as brilliant epigrams that seem to carry with them the surface-marks of sincerity. To my mind, he is as great a charlatan as is any one of the doctors whom he "roasts."

Like the French philosophers of the eighteenth century who, under the guise of bringing about reform, tried to subvert every established institution, Mr. Shaw places his withering hand on all laws, customs, and professions.

Such a man, whether he be in politics, in law, in theology, in medicine or in literature, is dangerous. In politics, he would be a muckraker, a revolutionist or an anarchist; in law, he would be a pettifogger; in theology, a bigot; in medicine, a "quack"; and in literature, a fakir.

My appreciation of Mr. Bernard Shaw is this: that he is a versatile, unscrupulous, intentionally sensational, smart and unfair gambler.

He plays with words, phrases, thoughts, and sacred things with as little scruple as is shown by the card-shark who invites his friends into a poker game, deals the cards—all good hands—but reserves four aces and a king for himself. Mr. Shaw's juggling with words, his half-true statements, his sensational assertions, his cynical sneering at all established rules and customs—all of these things, to my mind, are done for the sole purpose of bringing grist to his mill.

Gambling is founded partly on chance, but largely on deception. In the latter he is a master.

However, we are giving this gentleman too much honor when we take him seriously. His books will not last.

By what right does Mr. Shaw presume to judge, to attack and to misrepresent the medical profession? Only those who are in and of that profession have the right to speak. To the initiated, medicine is a world within itself. It has its own history, its philosophy, its literature, its aims and aspirations, of which the world at large knows nothing.

It has its subsidiary arts and occupations, its organizations and institutions, its ranks and grades of honor, which belong to it alone. In ethics, traditions, and superstitions, it is older—far older—than the Christian Church. In use before the civil or the canonical law, it recognizes no arbitrary enactments. Nature is its only court of equity; and in her presence battles are fought and won, or fought and lost, such as no soldier and no lawyer ever witnessed.

Do you think that we shall permit a literary anarchist to cause us to forget its ever-living charities, its moving scenes of joy and of sadness, its many sunny aspects, its broadening, ennobling, and liberalizing influences which few beyond our own circle can properly appreciate, and no one so well understand as ourselves?

No—not for such a man as Mr. Bernard Shaw.



A Complicated Case of Typhoid Fever

How It Was Treated

By W. C. WOLVERTON, M. D., Fort Dodge, Iowa

I HAVE just discharged, cured, a typhoid-fever patient, in whose case the infection was so virulent and the complications and sequelæ were so many and varied that I feel impelled to report, somewhat in detail, the case and the treatment pursued.

The patient in question was an American schoolgirl, 12 years of age. She was first seen February 9. Her temperature was then (9 a. m.) 103.5° F., the pulse was 114; face flushed; conjunctivæ injected; she had severe headache, backache, and diarrhea. The girl stated that she had had diarrhea and headache and had felt "feverish" for a week or ten days, but had said nothing about it to her parents. Her father was convalescing from typhoid fever, and so a tentative diagnosis of the same disease was made in the case of the daughter.

The patient was given a preliminary dose of calomel, and a normal salt enema. Hexamethylenamine, 5 grains every three hours, was ordered, each tablet to be dissolved in at least one-half glass of water. An ice-cap was applied, for the relief of headache; also cool sponge-baths every two hours, when the temperature rose above 102 degrees. The diet was limited strictly to buttermilk.

Feb. 10. Morning temperature, 102.9° F.; pulse, 119. Rose-spots present on abdomen.

Feb. 11. Evening temperature, 104° F.; pulse 115. Typhoid vaccine, 100 million killed bacilli, was injected at the insertion of the left deltoid.

Feb. 12. Morning temperature, 103.4° F.; pulse 120; respiration 34. Evening temperature, 104.8° F.; pulse, 124; respiration, 34. While I was at the telephone summoning a nurse, the mother of the child came running down stairs with the information that the patient was "having a hemorrhage." Investigation showed that the blood, to the amount of a pint, had come from the urinary tract—not from the bowel. Before it was learned from whence the

blood had come, the foot of the bed had had been elevated and an ice-bag had been applied to the abdomen. Fearing that the hexamethylenamine was the cause of the hematuria, the use of this remedy was discontinued.

Feb. 13. Both morning and evening temperature was exactly the same as on Feb. 12. Urine contained much blood.

Feb. 14. Temperature, both morning and evening, 104.2° F. Patient delirious. Blood clots passed from the urinary tract. A 100-million dose of typhoid vaccine was given.

Feb. 15 to 20. Temperature gradually was falling, from 103.4° on the 16th to 100° F. on the morning of the 20th. There was marked cardiac weakness, with rapid, weak, irregular pulse, with a rate of 136 to 160 per minute. Digitalin, strychnine, and adrenalin, hypodermatically, had to be given frequently. The patient was very delirious; the ice-bag was constantly applied to the head. Hematuria was disappearing. A daily physiologic saline enema was given. Typhoid vaccine, 200 million on the 16th, and 300 million on the 19th, was administered subcutaneously.

Feb. 21 to 25. Temperature was ranging between 102° and 103.5° F. There was some pus in the urine, from cystitis; a slight amount of albumin; no casts; very little blood; urine contained bacilli typhosi, bacilli coli, and streptococci. There were administered, typhoid vaccine, 350 million, streptococci, 25 million; bacilli coli, 50 million; and staphylococci, 100 million, on the 21st; and typhoid vaccine, 500 million, on the 24th. After the last dose of vaccine, the temperature fell to 100° F., but soon rose to 102.6°; and then hung between 101 and 102 degrees.

Now bronchitis developed, and heroin and ammonium chloride were given. The use of the intestinal antiseptic tablet (the sulphocarbolates of zinc, calcium, and sodium) now was begun. It would have

been given from the beginning, but was not obtainable.

Feb. 26 to Mar. 3. An abscess forming at the angle of the left scapula, the same was opened and dressed. Others, some twenty in number, soon appeared in the gluteal regions; these were pyemic abscesses, being deeply located. One large abscess made its appearance in the left mammary gland.

The temperature was falling gradually, reaching 99.2° F. on the morning of the 28th. On the morning of Sunday, Mar. 3, the temperature was 98.4 F., but, in the evening it jumped back to 102 degrees. The nurse noted that the patient did not straighten her legs and that she was becoming very sensitive to light and noise. An immense amount of pus now was discovered in the urine, being as much as half its volume, and it was evident that the infection now involved the kidney (pyelonephritis).

Arbutin was now given, at first in doses of 1 grain every three hours; later, as the urine cleared up, in smaller dosage. On the evening of Mar. 3, there was administered a dose of vaccine containing bacilli typhosi, 125 million; streptococci, 25 million, bacilli coli, 50 million; and staphylococci, 100 million.

Mar. 4 to 7. Marked symptoms of meningeal involvement were present; Kernig's sign was easily obtained; legs and thighs were drawn up close to the body; head was slightly retracted; there was nystagmus; the patient screamed when touched and became rigid when turned in the bed. Hyoscine, morphine and cactin became necessary to prevent convulsions. Street-cars slowed down and barely moved past the house. Veronal was given; also calcium sulphide, 1 grain every three hours, to saturation. Normal saline solution was continuously administered per rectum, by the drop-method.

The temperature climbed to 104°, then suddenly fell to 99.6°; then quickly again went back to 102° F. This was characteristic of profound sepsis, being very irregular in its rises and falls, remissions of 3 degrees within as many hours being common. There were frequent chills and sweats.

Pulse went as high as 150; respiration-rate ran up to 48 per minute. At 2 a. m., on Mar. 7, when there was a temperature of 102° F., a dose of mixed vaccine, containing 25 million streptococci, 50 million bacilli coli, and 100 million staphylococci, was administered subcutaneously. At 4 a. m., the temperature had fallen to 98.2° F.

Mar. 8 to 10. Septic temperature and pulse continued. Meningeal symptoms were gradually disappearing. Temperature at noon, on Mar. 10, was 103.8° and at 10 p. m. it was 98.6° F. The mind was clear.

Mar. 11 to 13. Septic polyarthritis, involving knees and ankles, was manifested; the temperature running from 99° to 103° F. The inflamed joints were painted with methyl salicylate and wrapped in cotton. Vaccine containing streptococci, 30 million, and staphylococci, 100 million was given. Internally, aspirin was given, 5 grains every two hours. On the evening of Mar. 13, the temperature very suddenly fell from 102.6° to 97° F. From this time on the temperature practically continued normal, never going above 99.2 degrees.

On Mar. 30, phlebitis of the left femoral vein developed. The patient was kept quiet in bed, heat was applied, and calcium sulphide was given internally.

Today, April 12, the patient is able to sit up in a wheel-chair.

Since the meningeal symptoms disappeared, the patient has been getting the arsenates of iron, quinine, and strychnine. She has developed a tremendous appetite; her digestion is good; and she is "picking up" amazingly, in spite of her long illness.

I think, in fact I *know*, that this girl owes her life to active-principle treatment. Outside the hygienic, hydrotherapeutic, dietetic, and vaccine treatment, the remedies used were: digitalin, strychnine, adrenalin, heroin, phenolsulphonates of zinc, calcium and sodium, hyoscine, morphine and cactin, veronal, calcium sulphide, methyl salicylate, aspirin, arbutin, and the triple arsenates (of iron, quinine, and strychnine), administered as indicated by the clinical symptoms.

Not a "galenical" preparation was used in the case.

Sexual Immorality, and Its Significance

A Discussion of Its Physical and Psychic Causes

By **ELIZABETH HAMILTON-MUNCIE, M. D., Ph. M., Brooklyn, N. Y.**

EDITORIAL NOTE.—This paper has been read by the author before the American Association of Official Surgeons, the World's Purity Congress, the New York State Homeopathic Society, and various other scientific and sociologic bodies. It considers a subject of vital interest to the race—one that the author handles in a masterly way. It will be completed in a succeeding issue.

MORE extensive even than Rome herself are her catacombs. Great and beautiful, she may be likened to a vast mausoleum under which lie the bodies of innumerable multitudes; a fitting symbol of our modern civilization—portentious and fair to look upon, dotted with churches, interposed with the sound of hymn and prayer, yet underneath a boneyard.

The great foundation fact of the social order is sex. From it emanates the best and the worst of human characteristics. Through conformity to sane sexual laws, is reached the happy ideal of human attainment. From the perversions of these same laws, deep-seated evils, with their gloomy hordes of end-products, are beyond estimation.

Virtue of the Home Versus the Nation

Former President Theodore Roosevelt has said: "The greatness of a nation lies, not in its army, its money, its possessions, but in its homes; for within its homes and by its mothers are the men of the nation made." To this we give assent, except as to the mother alone making the men of the nation. This is a half-truth, and, therefore, dangerous in its result. Man has long enough, in poetry and in prose, robbed, and has been robbed of his rights to noble fatherhood; and it is high time for him to take his responsibilities, with their resulting joys and honors. Upon the virtue of the entire family—not of the wife and mother alone—depends the virtue and integrity of the community, the state, the nation. Likewise, destruction and ruin of all that is good follows close upon the trail of vice.

America, with her licensed prostitution, her "white-slave traffic," and her yearly increasing "venereal plague," must soon

act, or she must fall—as fell the wicked cities of Sodom and Gomorrah.

In reference to the white-slave traffic, the "Encyclopedia Britannica" says: "Though it may coexist with national vigor, its extravagant development is one of the signs of a rotten and decaying civilization—a phase which has always marked the decadence of great nations."

Human Society a Union, Every Individual a Member

Human society is an association for mutual usefulness, profit, and pleasure. It is a partnership: each member has a voice in its affairs; each member binds and influences by his acts those with whom he comes in contact.

Unlike every other partnership, however, human membership in it is not a matter of choice. One cannot say, "I will join it or resign from it, as I prefer," for by the very fact of birth he is of it, is welded into it. Accordingly, every individual has a proprietary interest in it. He has a share in its assets and its liabilities. He must be a participant, not only in its dividends, but in its assessments as well.

By the very gift of life every human being becomes an accountable unit of the state and must have primary concern in the questions pertaining to social welfare—capital, labor, poverty, equality, justice, and rights of whatever kind.

This fact may be generally recognized by the few; but it occasionally becomes painfully apparent to all, as in those vehement and cyclonic revolutions—the gigantic upheavals of city or nation—which, so regardless of the value of life and property, tell of the subterranean forces of society that must be regarded.

It is not my purpose, however, to take up here any of the great questions enumerated, but to invite your attention to a theme that appertains to and underlies them all—that reaches to the very root of society, and that lies contiguous to the heart of life itself. That theme is:

The Genesis and the Sexual Relationships of Human Beings

This subject is of a distinctly personal nature and until recently has been seldom mentioned; but which, according to admitted scientific facts, plays such an important part socially.

The happiness of the individual constitutes the happiness of the world. All misery and suffering begin with him, and the prosperity and happiness of a family or nation depend upon the gaining of an equipoise of temperament and circumstance by each member. The key to the social problem is the individual; in fact, he is himself the problem, and consequently all effort toward the betterment of social conditions must deal, primarily, with the person himself.

The greatest benefactors are those who, by their wise measures, change those miserable subjects who have no responsibility into happy persons of a helpful disposition; thus placing them on a higher plane, causing them to think higher thoughts, and teaching them to control their lives.

All effort to better society must, necessarily, then, include the alleviation and elevation of those conditions governing the lives of those already afflicted, giving them the best opportunities for existence, and, further, forestalling the wreckages of life. To do this, two things must be accomplished, namely: make the future generation better than the present, and, improve the present.

Normal Sexuality Versus Sensuality

Before considering the cause of a disease, something must be known, not only of the disease itself, but also of that substance capable of becoming diseased. If there be such a disease as sexual evil or ill, there must first exist a sexual good. Therefore, to be logical, we must first acquaint

ourselves with the facts of true sexuality and then, in turn, with its disease—which we shall term sensuality.

Sexuality is as beautiful as sensuality is hideous. Prudery is the very servant of sensuality. A purity of sex-vision excludes sensuality by a self-enforcing law, just as light dispels darkness, *and without that effort, agony or strain which belong to the prudish who would fain be pure.*

Sexuality has a lawful focus. Sensuality is sexuality unlawfully focused. God will purify us from sensuality, but He will not emasculate us. Purity, then, is not sex-unconsciousness, but sex at its fulness, washed clean of lust. Purity and prudery, sexuality and sensuality are exact opposites.

Sexuality is that out of which everything great is made; but, like all physical basic principles out of which everything is built in this world, and which has become distorted, it has to be made over again.

People seem not to realize that sexuality is the factory, the steam, the force from which all great progress is made. Like steam or electricity, it is powerful only when it is under control.

If human beings knew how to transmute sex-power into purpose—how to turn it into some great work—there would be recorded an advance in true civilization and true development such as the sad old world would have never known. We know how to transmute electricity, how to make it produce light or to turn wheels; but when we learn to put our electrical force to some purpose, then will this power of life be diverted to some great power and achievement; where now, frittered away, it is a destructive where it will be a constructive force.

Man depletes his sexual system by wallowing in sensuality. He becomes a moral leper and brings the filthy product of his sensual living to innocent wives and babes.

Sensuality, on the other hand, is sexuality diseased, and, as such, it concerns every individual. None can escape its ravages or its contaminating influence.

The disease itself, sensuality, is not only varied in its manifestation, not only localized and constitutional, but in its

remote results from generation to generation, it condemns to loathsome death both body and soul.

Its most prominent product and the most wide-reaching symptoms are syphilis and gonorrhea, with their resultant institutions for the blind, the insane, the epileptic, the incompetent, the perverted, and all that comes between; and, furthermore, to syphilitic inheritance are now accredited, by many authorities, tuberculosis and also carcinoma.

Some Pertinent Statistics

In New York City, in 1909, there were accounted for 225,000 cases of venereally diseased men, and these men mingled freely with their fellow men, and admitted into all walks of life, while a person afflicted with a simple case of measles is isolated. Only gonorrheiacs and syphilitics are free to distribute their deadly contagion. You may divide the number of the 225,000 venereals by five, and you still have in each one-fifth part a greater number than of all the six legally reportable contagious diseases combined.

In New York City there were, at that time, 20,000 known prostitutes. These came from 20,000 homes—and a continuous supply of our maidens is thus demanded.

Every one of these female prostitutes has become infected with one or both of these diseases, and that from a male prostitute. Should she, in turn, infect but one man a month (and she infects many more) then these 20,000 prostitutes would, it is plain, infect 240,000 a year, which proves that the estimate of 225,000 venereally infected men is away below the real number of these vampires who menace the public health.

Do not these figures prove that it is the men prostitutes that should be looked after? Humanity is always off the track on matters pertaining to sex. Fallacies of logic are ever on the throne.

But, look you: 60,000 "white slaves" die every year; 60,000 mothers' darlings have to be supplied annually to fill their places—sacrificed to sensuality and its results.

Indifference of Physicians in the Past

Can we, as physicians, to whom is entrusted the public health and the closest of confidential relationships in the homes of our lands—can we be blind to this disease, to which tuberculosis is but an iota? Before it, we stand appalled; for we have allowed the indifference of our apparent helplessness to blind us. But the time is now ripe for action, and we must search out the *causa occasionalis* of sensuality; and, as in all other diseases, here also we find it to be both predisposing and exciting. I prefer, however, to classify its causes as both physical and psychic.

Causes of Sensuality Are Physical and Psychic

These physical and psychic factors act and react upon each other, until the individual, lost to all harmony of normal conditions, becomes soaked in his diseased sexuality; his real, God-given, music is gone. Even a Paderewski cannot get harmony from an instrument out of tune. No more can the sensualist catch the sweet strains of normal sex-life.

There are physicians who have learned to regard man's physical body as made up of life-wires which, irritated at the very citadel of life, so fill him [with unholy suggestions that he cannot see purity, much less attain it. Such a physician will instantly look for physical causes for his patient's sensuality, and it is often found that he needs a surgeon and a hospital rather than censure and a reformatory.

We have, then, to forgive criminals; for, by tuning up their bodies, they are taught to recognize life's harmonies.

As practical examples of physical causes for sensuality, I would call your attention to the following cases, and hasten to our conclusion.

A little girl of nine years had become a degenerate from masturbation. Her habit was not even covered. So indifferent had she become to all punishment and persuasion, and so bold in the performance of her habit, that she was finally isolated from other members of the family. She stole, she lied, and had become bereft of all moral responsibility. This girl was finally freed from a redundant and adherent

prepuce. This improved her condition, but did not cure it. After six months, therefore, the clitoris—the organ of sex-sense—was extirpated in its entirety, which resulted in a cure. She is now twenty years of age and a charming, normal young woman.

A baby boy, nine months of age, had constant erection and was masturbating. Circumcision did not entirely relieve the condition. The correction of a subluxation of the innominate bone completed the cure.

In the first instance, the adherent redundant prepuce irritated the terminal nerves. In the second, the trunk of the same nerve was irritated. Either one of these conditions was capable of producing a sexual pervert.

A young woman of high standing in her community and her school (where she taught a class of large boys) confessed to me her struggles over suggestions of a sensual nature, until she said: "I can endure it no longer, I am afraid of myself in the presence of men. I also must practice self-abuse. I cannot help it. My mind will surely go unless you can help me. I've fought this thing for years."

Examination revealed in this—as always in such cases—physical nerve impingement about the lower orifices of the body. Accordingly, an operation liberating an adherent prepuce; removing the retained smegma that constantly called her attention to that part; amputating the hypertrophied labia; smoothing the vagina of the irritable carunculae and the serrated hymen; dilating, curetting, and packing of the anti-flexed uterus (which usually completes the clinical picture of these cases)—restored the young woman to normal life; and she is today one of the most successful and powerful proprietors of a large mission in one of our great cities. She knows whereof she speaks. She can appreciate the difference between sensuality and sexuality.

In this young woman's case, had proper attention been accorded the adherent prepuce, the long train of resultant pathological conditions would not have developed.

Wrong Ideas Regarding "Virility"

Here is the record of a man of high standing who, in middle life, became insane. Three years prior to this calamity the writer, having learned from his wife the sexual habits of this man, had summoned him and urged moderation of his sexual relations, for the good of his wife, and then found that his idea of virility—even though he was a highly educated man—was that a most frequent functioning of his sexual powers meant greater ability as an orator and preacher. As a result of this erroneous idea, indulgence was repeated several times nightly. He also confessed to a fear of his loss of self-control and consequent disgrace should his wife be taken away from him; and so, being a man desirous of keeping right, he suffered morbid fear of being away from her any length of time. It is hardly necessary to mention that his natural power of oratory had begun to fail and his audiences to dwindle.

He was advised to have immediately an operation for the removal of a tightened foreskin and of hemorrhoids. So fearful was he of losing his virility that he declined the surgical intervention, preferring rather a sickly wife—and his supposed manliness. To remove the scales of sensuality from his vision was impossible as long as the shackles remained on the terminal nerves of his pelvic orifices, even though I thundered at him oracles of high ideals, of scientific facts, and, furthermore, a prophesy of his becoming insane inside of two years.

Three years had rolled by, and, sure enough, he had been insane just one year, when again he fell into my hands—this time with a subconscious conviction of his insanity, which he connected with my prophesy of his impending fate three years before.

He now was circumcised—and never a boy needed it more than did this man of the clergy and the father of grown children. His hemorrhoids were also removed. And, behold! he became a new man, and for the first time in his life caught a glimpse of real, true manhood. This man now is able to conserve or allow to function at will his sexual existence. He is capable of satisfaction and joys in all things of which he

never dreamed before. He is, also, moderate in all things. His wife is happy and well. His preaching is blessed of God. He is now a grateful, virile, but self-controlled, man.

Many similar cases could be cited, but these four represent a class of physical causes leading up to the physical cure of sensual ideas and desires. But in this connection should also be mentioned telescoped sigmoid flexures which are also responsible for much sexual trouble both in man and in woman.

[We regret that for lack of space we were unable to complete this address on the sex-question in this issue. It should be read connectedly. However, we are sure that our readers will turn eagerly to its continuance in the August number. It is an encouraging sign of the times that women, as well as men, have the courage to discuss the problems growing out of the sex-relation. The work that Dr. Muncie is doing is a great work, and we wish her God speed in it.—Ed.]

(To be continued.)

Electrotherapeutics for the General Practitioner

Why He Should Make It a Specialty

By HOMER C. BENNETT, M. D., M. E., Lima, Ohio

ELECTROLYSIS is the chemical decomposition of a compound body by electrification. Anything that is subject to electrolysis is called an electrolyte, and, as a compound body, must contain water and a salt.

Nicholson and Carlisle discovered the process of electrolysis, and in the year 1800 they decomposed water into oxygen and hydrogen—so that the theory and process is not new. Electrolysis is the process of dissociation, or analyzing, of a fluid by an electric mode, hence the term electroanalysis or electrolysis.

The galvanic mode is the form that causes chemical decomposition. Here the two poles have each a different potential, and, for convenience, the pole having the higher potential is called the positive, while the one with the lower potential is called the negative pole.

The direct (or constant) commercial (or incandescent) mode has the same properties and characteristics of the chemically generated galvanic mode and also will produce electrolysis. However, owing to the unusually high voltage of the street-mode, and the sensitive nature of the parts where we usually desire to produce or cause electrolysis, it is generally advisable to use the galvanic mode for this work.

The galvanic form is a constant, steady silent mode, and, when applied mildly will stimulate absorption; it also is useful in the removal of strictures, subinvolution, hyperplasias, exudates, and foreign deposits, while, with a powerful dose, you can burn, cauterize or even destroy tissues.

Remember, this thermic, or cauterizing, effect, is produced only by very strong doses, and is, therefore, not to be considered, in electrotherapeutics, as an effect. Persons coming in contact with live wires, where a bare metal electrode or wire (a good conductor) is in contact with the skin (a poor conductor), the high-potential mode concentrates its local polar effects at the point of contact and we have the same result that we get in the cautery point, viz., a rapid production of heat and incandescence, and the cautery, or thermic, effects. But these effects of lethal doses are not what we mean when we speak of electrotherapeutic doses. Therefore, we say that electrolysis is not cautery, or thermic, as some claim, but is a purely chemical effect on the tissues.

According to our understanding of the term, electrolysis refers essentially to the decomposition, re-arrangement, and so forth, of chemical compounds, induced by means of the electrical mode. This particular

effect of electrification in its passage from one pole of an electrical generator through any matter acting as a conductor back to the other pole is a property belonging to the galvanic mode only, and is not produced by the faradic, magnetic, sinusoidal, static or high-frequency modes.

Again, this action of the galvanic mode upon various compounds is due to the polar effect of such mode, which must be unbroken, or uninterrupted, for a certain considerable length of time, in order that there may be demonstrated any decided change going on in the electrolyte.

This action of the galvanic mode is called its polar effect, because the principal energy, or force, of such action appears at the two poles where the terminals of the rheophores come in contact with the electrolyte.

The two poles have still further dissimilarity in the marked difference in the chemical action of each. At the positive pole oxygen and the acid elements are liberated, and with powerful doses it has the effect, upon living tissues, of an acid caustic, causing coagulation of albumin, a shrinking of tissues, and a superficial, dry, white, hard cicatrix; also, with a few exceptions, when a bare metal electrode is used, there is a corrosion of the metal and a deposit of the metallic salts in the tissues.

Gold and platinum, the "royal metals," are not at all corroded by electrolysis, and aluminum to but a slight degree, by the negative pole. These are the only exceptions.

At the negative pole, hydrogen and the alkali elements are liberated, having the effect upon living tissues of an alkaline caustic, not coagulating albumin, nor shrinking tissues, but produces a deep, red, moist, soft, condition, and when bare metallic electrodes are used there is no corrosion of the metal (except of aluminum, slightly,) nor deposition of metallic salts.

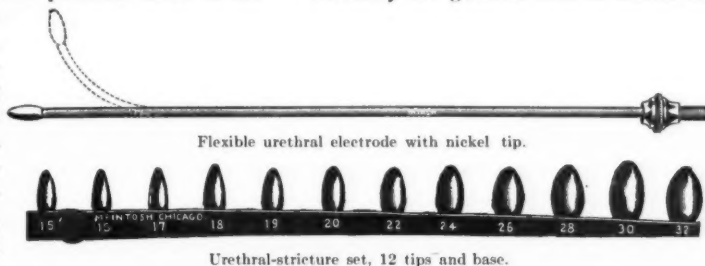
Thus we see what a vast difference there is between the action of the two poles. We now realize how important it is to understand that difference, for, if we go to guessing or applying it haphazard, we have only one chance in two of hitting or missing it, and that chance meaning success or failure.

The Practical Application

Now, in moles, warts, corns, papillomata, and the like, we have a dense fibrous tissue, and, knowing the different action of the two poles, it is easy to select the negative pole to resolve and remove them.

In other conditions, even where we have soft vascular growths to remove, such as epitheliomata of the lip or nose, angiomas of the cheek or eyelid, where, for cosmetic effect, we do not wish any scar or white contraction to appear, the negative pole again is indicated, although the positive, at first thought, seems the more preferable.

Probably the greatest field of usefulness



of electrolysis is in the removal of strictures of the various canals of the body. The details and technic of these applications will be more fully detailed later, in the talks of electrotherapy.

There is no one branch or principle in relation to medicine and surgery that is more clean, exact, and scientific than that of electrolysis of the living tissues, when intelligently and properly applied.

Electrolysis of living structures (except dry epidermis and bone) is like that of weak saline solutions.

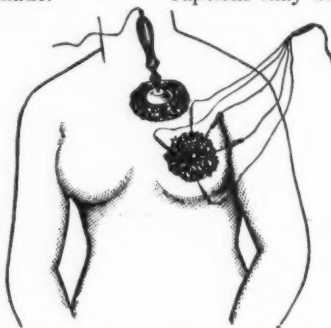
The active electrode usually is a partially insulated needle attached to the negative pole. To the other pole is connected a large-surface electrode (well wetted), which may be placed on any part of the body.

The needle is then inserted into the growth and the circuit closed, whereupon electrolysis immediately begins to take place around it.

The needle attached to the negative pole of course attracts the hydrogen corpuscles and alkaline bases, repelling the oxygen and acids, which latter are attracted toward the positive pole. There is always an escape, during the operation, of a portion of the products around the needle, especially of the hydrogen gas, yet a portion of the product always is retained in the tissues so acted upon, which then becomes as foreign matter. The forces of absorption promptly set to work to take up and carry away this disorganized matter, the process being completed within a few days subsequent to the operation. Should the growth be small, the one operation, as partially described, may complete the removal, provided always that the details have been properly carried out. When the growth is a large one, a proper interval should elapse before a second puncture is made.



Electrolysis of small growth on face.



Electrolysis of mammary carcinoma.

An electrolyte, to be susceptible to electrolysis, must be a compound body, consisting of water and a salt in solution.

All soluble inorganic as well as all organic compounds in solution or in a moist state are susceptible to electrolysis.

We have shown that the passage of a galvanic mode through water, for a given length of time, will decompose a certain volume of the water into its elements. Hydrogen, which is electropositive, will collect at the negative pole, while the oxygen corpuscles, being electronegative, will

gather at the positive pole; thus corresponding to the old principle in magnetization, that like repels like but attracts unlike, or positive repels positive but attracts negative.

This operation of electrolysis on certain forms of tumors is safer against their return and also much less disagreeable to the patient than an operation with the knife. The most delicate and particular work in electrolysis of living tissues is for the permanent removal or epilation of hairs, but which is tedious, requiring great care and accuracy.

The details and technic of epilation and electrolysis in applied electrotherapeutics will be taken up fully in a later talk devoted to these subjects.

Be cautious about using the mode for electrolysis from a continuous commercial circuit about the face and head, brain, and organs of special sense. Why? Any interruption of the mode may prove unpleasant if not fatal to your patient. Such interruptions may be caused by the electrician

at the station changing circuits from one machine to another or by the grounding of a wire and melting out of a main fuse, as well as from various other mishaps.

What Effect Has Anodal Electrolysis?

Anodal electrolysis occurs at the positive pole and is similar in action to an acid

application, owing to the liberation of oxygen and the formation of acids.

What Effect Has Cathodal Electrolysis?

Cathodal electrolysis occurs at the negative pole and is similar to the application of an alkaline caustic owing to the liberation of hydrogen and the formation of alkalis.

What Is Metallic Electrolysis?

This term is used in electrotherapeutics to designate the use that is made of the

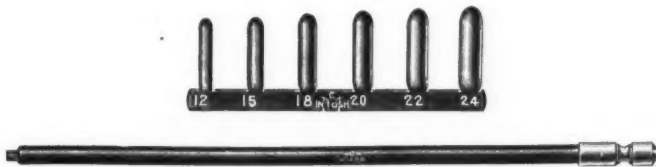
secondary products formed at the anode or cathode when the electrode employed is composed of a substance that, by uniting with the ions set free, will form secondary products of some medicinal value. Thus needles or urethral, uterine, and nasal electrodes made of pure copper or zinc and used as the anode have been found of service, by reason of the oxides and chlorides of copper and zinc that are formed at the point of application. By phoresis (to be discussed in our next talk), which is also an effect of the direct mode, these metallic salts are made to penetrate the contiguous tissues for a greater or less depth, and whatever local medicinal effect they possess is thus intensified.

Metallic electrolysis is, for obvious reasons, almost exclusively a function of the anode. One metal—aluminum—which is frequently employed as a material for making elec-

and this should be placed on some remote surface of the body, as the palm of the hand, the sternum or the back.

The anode is the "active electrode" in anodal electrolysis. But both anode and cathode can be actively employed at the same time in an electrolytic treatment, if the operator so desires.

The accompanying cut shows the first needle-holder invented by Dr. H. C. Bennett. Since it was introduced to the profession it has been improved until now it is the best needle-holder on the market. It now has a thumb-screw on the handle, and the needle-holder is now made in one piece, instead of two, as shown in the cut. This needle-holder was invented as a result of a necessity for it. It will hold from one to ten needles, and is adapted to the treatment for the removal of small growths of all sizes and shapes the bases of which are



Copper and zinc set for positive metallic electrolysis. Six tips and staff.

trodes, is corroded by the alkali ions, but it is not yet known that the aluminates of potassium and of sodium are of any value as local remedies. It must be remembered that such decomposable electrodes should not be used for the anode where a deposit of the metallic salts in the tissues would be objectionable.

an inch or less in diameter. Each needle is held firmly by a separate screw, which allows of one or more needles being removed without disturbing the others. This holder is strong, handsome, well made, and inexpensive, and can be used for a variety of purposes. Its uses are well explained in Lesson No. 25 of the mail course of the



The Bennett Needle-Holder.

In using electrodes with the constant mode for electrolytic effects, ordinarily the action at only one of the electrodes is desired. This is then the "active electrode", while the other electrode, broad and well moistened, is the "dispersing electrode,"

National College of Electro-Therapeutics, on the "removal of small growths, superfluous hair and blemishes by electrolysis." This holder is 5 1-2 inches in length, handsomely nicked, with polished hardwood handle.

The Value of the Medical Society*

By E. M. HOOVER, M. D., Elkhart, Indiana

THE worth of the medical society may be considered from several viewpoints, namely, from that of the individual physician, from that of the medical profession as a whole, and from that of the public.

I shall mention only cursorily a few of the benefits the individual physician derives from active membership in the medical society. The doctor who is not benefited by this institution is the one who deliberately and persistently absents himself from the meetings and steels himself against its kindly offices and its beneficent influences.

How the Members Are Benefited

I am now pleading for a better appreciation of the worth of the medical society. We cannot afford to shun these meetings. The beginner in practice finds here the best place to make the acquaintance of the older members of the profession who are in position to do him good turns in the form of anesthetics to give, night-calls, and so forth. The older practitioners who attend the meetings are the ones the younger men will think of first when in need of a consultant. There are many other ways in which the medical society is seen to possess a money value, but time does not permit to dwell upon them.

The medical-society meetings afford an excellent opportunity for social intercourse among its members. Good fellowship is here developed, a soil is provided for the growth of that spirit which "provokes unto love and unto good works." This opportunity should be taken advantage of, then little room would be left for uncharitableness. That man is unfortunate indeed whose disposition is such that a close acquaintance is detrimental to his reputation. But I can conceive of no one so unfortunate that a course of attendance upon the meetings will not, in a large measure,

prove his salvation. The more we know of each other, the more of good and the less of evil we shall see in each other. To know each other is certainly worth our while.

Someone has said: "The troubles of a family, the business of making money, the demands of a profession destroy the elasticity of mind. . . . The waxen tablet of memory becomes hard and crowded." To counteract this tendency, there is nothing better for the busy practitioner than activity in the medical society. This institution may be made to supply him with a very high grade of postgraduate instruction. "Rightly used," says Osler, "it may become a touchstone to which he can bring his experience to the test and save him from falling into the rut of a few sequences. It keeps his mind open and receptive, and counteracts that tendency to premature senility which is apt to overtake a man who lives in a routine." The educational value of the medical society is what we make it. This value will finally be measured, not by what we have received, but by what we have given.

The practice of medicine constitutes a profession, and doctors naturally fall into a group by themselves. Whether it were better to exist as a heterogeneous mass of individuals or as an organized body is a question the past teaches us to decide in favor of organization. The spirit of association is inherent in human nature, especially the association of those pursuing the same work and having common interests. If the present tendency among medical men can be taken as an indication of the viability of the medical society, no one need have fears for the future of these organizations.

Granted that the American Medical Association is not perfect, that it has serious limitations, yet it is seen to be the greatest agency we at present can command for the betterment of the profession. The founders of one of the oldest medical societies in America declare the most important function of the society to be, "to lay the

*Read before the Elkhart County (Indiana) Medical Association, Dec. 1, 1910.

foundation for that unity and friendship which is essential to the dignity and usefulness of the profession." How well the medical society has subserved that function, let the good feeling that exists among the doctors attest.

The past has witnessed great rents in the robe of Æsculapius, but these happily are fast disappearing, never again to occur. The medical society, by fostering the spirit of unity and friendship, has made straight a highway for science which is now doing its perfect work in destroying sectarianism, the great cause of the division among us. Allopathy is dead and without a mourner, and homeopathy is not feeling well.

The medical profession has taken on tangible form. It maintains a national organization with state, district, county, and city branches. Through this form it speaks to the world and is beginning to be heard. Organization has added immeasurably to its dignity and power for good in the community. It is attracting to its ranks the brainiest and best men and women of our time.

Benefits Accruing to the Public

Let us now turn to a consideration of the value of the medical society from the viewpoint of the people in general. Unless its influences reach the public, its achievements are but failures and its deliberations a farce.

But it is not difficult to demonstrate the good the society does here. It makes for sociability in the individual doctor, whose patients reap the benefit of a kindlier sympathy, a cheerier smile, and a more hope-inspiring demeanor in their medical attendant. It provides him with educational facilities which, if properly utilized, keep him abreast of the best medical thought and practice the benefits of which are surely to be taken into account by his patients.

One of the best recent proofs of the good that comes to the public from the organized profession is the rather strenuous campaign undertaken by the interests that thrive by preying upon the people, especially those who because of ignorance or disease, or of both, are easily imposed

upon. I refer to the National League for Medical Freedom.

The movement on the part of the American Medical Association for a national department of health must be check-mated by the above-named interests, not because the establishment of such a department would result (as the literature of the "league" avers) in denying to the people the right to determine for themselves the kind of medical treatment they shall employ, but because it would mean the enlightenment of the people in matters of health and disease to such an extent as to be fatal to the success of these inimical interests.

To get an idea of who is who in this "league," one needs only to look at the names of the members of the "advisory board." There one sees the names of the publisher of the mouthpiece of the patent-medicine interests, of the president of the American Drug Syndicate, the president of an antivivisection society, a few "mental healers," and a "new-thought" advocate.

No, a national department of health would not prevent a free American from trying to cure diphtheria or erysipelas by taking "spinal adjustments," but it would have a tendency to decrease the number of those who would seek the services of the "spinal adjustor."

Shall the medical profession meet these attacks? Yes, but by ignoring them. By this I mean that we should not engage in a controversy with the "league." Such a movement on our part would give them recognition they otherwise could not hope to enjoy. Seriously to discuss such vagaries as chiropractic, Christian Science, and the antivivisection movement would lend dignity to fallacy and tend more to advertise and to popularize these heresies than to discredit them.

Let us play the game wisely and not as they suggest. Our move should be a vigorous campaign of education of the public. Let us simply tell the truth as to the purpose of the proposed national department of health. It has nothing to do with the regulation of the practice of medicine. It has to do with the prevention of disease. The establishment of such a department would mean that the health of human beings would re-

ceive something like the attention that is now given to farm-animals. The health of the people is the nation's greatest material resource, and it is but the part of common sense and practical wisdom to create a department in our national government the function of which should be the conservation of this resource.

Useful Services Medical Societies May Render

A consideration of how the medical society may extend its sphere of usefulness in the community is here in order. This is a field which up to the present time has remained almost altogether unworked.

The public should be enlightened as regards private and public sanitation. The people should have more intelligent ideas of such matters as the production of milk and the supply of water. There exists a crying need for safe and sane information on sexual matters. Legislation looking toward the suppression, or even the regulation, of the social evil is absolutely futile so far as lasting results are concerned. The only weapon available is education. Parents, teachers and preachers must be taught to throw their modesty and prudery to the winds; and the doctor must be the one to teach them, for he of all men knows best the fearful consequences of the social evil.

The people should be made conversant with the wonderful achievements of medicine. They should know more of the work of our profession, of its larger purposes and aims for the future. They are entitled to know, and we are derelict in our duty if we do not inform them of the triumphs of medicine over smallpox, malaria, diphtheria, yellow-fever, and of its winning fight on meningitis and tuberculosis. We do an injustice when we withhold from them knowledge of the mighty deed of heroism and self-sacrifice of the Yellow-fever Commission and of the men who voluntarily submitted to the experimental inoculation which resulted in the discovery of the mode of conveyance of yellow-fever.

My experience tells me that the public is anxious for and ready to receive the knowledge we are prepared to give. Our negligence in this matter has caused us to

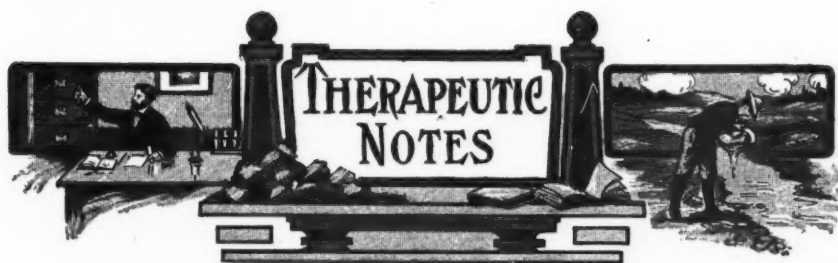
miss much of the confidence and respect, on the part of the people, which we should have enjoyed. We have nothing to hide, nothing of which to be ashamed. We are engaged in a noble task, and, for the good of the cause for which we labor, let us step out upon the field of larger influence by educating the public to a position where it can intelligently cooperate with us.

This campaign need not be delayed. We should begin it *now*, and not with the blare of trumpets, but quietly and unobtrusively with the means already at our command. The American Medical Association is prepared to furnish, at small cost, literature adapted to our needs in this work, the pamphlets at present available being: "The Great American Fraud," "The Boy's Venereal Peril," "Fakes Exposed" (16 pamphlets), "Defense of Medical Research" (17 pamphlets). Every physician should keep an assortment of these on his waiting-room table. This literature, judiciously distributed among the more intelligent and open-minded members of the laity, will bring good returns.

The public, further, stands in need of a periodical devoted to the dissemination of correct and proper information on matters pertaining to public and private sanitation, physical and social hygiene, and the triumphs and aims of medicine and surgery. The establishment of such a journal would be to the interest both of the people and of our profession; and the national organization should do this. Our criterion in this work of public education must be the people's best interest. If we steadfastly hold to this as a guiding principle we can not go wrong.

The aim of our profession is the eradication of disease and the promotion of health. To the accomplishment of this high aim, an educated public is an essential.

The final test of the value of the medical society is the good it does in the community, in the state and in the nation, and there is nothing that we can do at present that will help us to measure up to a higher standard of value than to make an intelligent, conscientious and persistent effort to create in the public mind right conceptions of the work of our profession.



FLUORIC ACID IN PYORRHEA

Dr. von Wunschheim, the director of the dental department of the Polyclinic in Vienna, has found applications of fluoric acid excellent in pyorrhea alveolaris.—*Wien. Med. Woch.*, 1912, No. 19.

In these cases, treating the acidemic condition (which is usually present) is fundamental. Examine the urine for acid and indican.

THE TREATMENT OF ECZEMA

Not long ago the writer was asked by a New York physician to suggest internal medication for a case of eczema. He advised the use of alnuoid and arsenic iodide, and, as usually is the result when these remedies are employed, a cure followed. Personally and through friends, he has passed along this suggestion to a number of other good doctors during recent months, and in every single case in which a report has been secured brilliant results followed the use of these two drugs. Of course, there should be appropriate local treatment, and the alimentary canal should receive sharp attention, but the alnuoid and arsenic iodide "work," in many instances, under the most unfavorable conditions.

EDEMA, IN A CHILD, DUE TO SALT

Dr. Franz Hamburger describes, in the *Muenchener Medizinische Wochenschrift* (No. 47, 1911), the case of a boy 5 years old in whom enormous edematous swellings appeared within a short period of time, and which could not be attributed to any renal or cardiac disease. The author believed that the cause was to be looked

for in an unusually high salt-content in the food, and, indeed, observed the disappearance of the swellings as well as of digestive disturbances when a diet poor in salt was ordered.

BRUCINE IN SUMMER DISEASES

Brucine is an alkaloid which is really neglected, probably because it resembles strychnine so much in its action. But in certain conditions it is undoubtedly superior to the better-known remedy. Especially is this the case in the treatment of the ailments of children and the aged, and in the alimentary disturbances of the summer months. It is less convulsant in action than strychnine, milder in action, and more decidedly useful as a bitter tonic to increase appetite and improve digestion. It should be used in all cases where it is desired to raise the tone of the digestive canal, as well as to increase general resistance. It is, therefore, particularly indicated in the diseases of the summer months and during convalescence.

HOW OFTEN SHOULD INFANTS BE NURSED?

In an interesting communication in the *Jahrbuch fuer Kinderheilkunde* (noted in the *Wiener Med. Woch.*, 1912, No. 20), Dr. Rietschel discusses the difficult problem of how often infants should receive the mother's breast. He concludes that, while nursing from five to six times in the day of twenty-four hours usually is justified, there are infants that require from seven to eight nursings in order to thrive well. In many instances the breasts become better developed by the greater frequency of empty-

ing, and this may be an important factor in deciding a physician's instructions.

IPECACUAHNA FOR ABORTING TYPHOID FEVER.

Frazier (*Medical Record*, Nov. 4, 1911, noted in *Progressive Medicine*, March, 1912) has employed ipecac in six cases of typhoid fever, giving it in salol-coated capsules. Beginning with 30-grain doses, these were each day diminished by 5 grains. The ipecac was preceded by a dose of the tincture of opium. The patient was placed in a dark room and instructed to lie on the right side, so as to favor the passage of the capsule out of the stomach as much as possible. The results obtained in the 6 cases named were, that in 3 the temperature reached normal three days after the administration of the drug, in 2, four days, and in 1, seven days after. These results were so remarkable that trials of this means of treating typhoid fever certainly should be made by others, substituting emetine for the crude drug.

THE MANAGEMENT OF PNEUMONIA

Dr. H. A. Hare refers, in *The Pennsylvania Medical Journal* for November (1911), to a previous paper in *The Therapeutic Gazette* for June, 1911, where he reported his experience as to the importance of studying the relative ratio of pulse-rate and blood pressure in the course of croupous pneumonia. Further experience leads him to repeat his assertion that the observation of this relation is necessary for a proper studying of our cases.

It may be pointed out that the favorable ratio in croupous pneumonia is one in which the pulse-rate per minute is less than the number of millimeters of mercury as shown by the sphygmomanometer. For instance, if the pulse-rate be 90 and the blood pressure 120, the patient is doing well. If the pulse-rate be 100 and the blood pressure 110, he is not doing as well as before. If the pulse-rate be 110 and the blood pressure 110, something must be done to bring back the normal difference referred to. If the pulse-rate be 120 and

the pressure 110, the patient is in grave danger.

The fall in blood pressure may be due to vasomotor or vascular or to cardiac causes. It is only in the latter that direct cardiac stimulation is required. If the vessels are at fault, the difference between diastolic and systolic will be marked; but if the heart is failing, this difference will become very slight, showing a lack of repulsive effort on the part of that organ.

Dr. Hare points out, very properly, that there is no treatment for pneumonia, as such, but only a treatment of the patient who has pneumonia. While the general management of any case is of greatest importance, the best therapist administers drugs only when positive indications for their use exist. These indications, it goes without saying, must be met definitely by the proper drugs required.

TREATMENT OF TUBERCULOSIS

In *The Medical Record* for May 18, Dr. W. Blanchard, of Chicago, calls attention to a number of accidents that have occurred after the use of Beck's bismuth paste, due to bismuth poisoning, and proposes, as a substitute, a paste consisting of 1 part of white wax, and 8 parts of vaseline, and sterilized by boiling. To this basis iodine may be suitably added in badly infected cases. If a skiagram is desirable, a paste made by boiling together 1 part of subcarbonate of iron and 2 parts of white vaseline will serve excellently for diagnostic purposes.

The author says that experience has taught several "don'ts" in the use of any flooding paste for the cure of tuberculous sinuses. Never should a sinus be injected in which the x-ray shows a sequestrum, because here the sinus forms a natural drainage-tube. The sequestrum should first be removed, when the sinus may be cured with the aid of the paste. Neither should a primary newly opened sinus be injected, for the reason that its walls are not definitely formed and the injected paste will wander unrestrained, making new sinuses and pockets. It is a mistake to obstruct necessary drainage; until the

discharge has thinned down to a semi-transparent and only slightly purulent condition, paste should not be injected.

The author says that it is in the old, long-suffering, bed-ridden cases in which the bone disease has run its course and the old chronic sinus persists, that paste flooding gives wonderful results, rather than in cases in which there is active bone disease. The reason is, that curing of the sinus does not mean curing of the tuberculous bone disease, and until the tuberculous process in the bone is arrested, it is futile to try to cure the sinus.

INTESTINAL ANTISEPSIS AND MELANCHOLIA

Robertson (*British Medical Journal*) testifies to the efficacy of the intestinal antiseptics in the treatment of melancholia. The bowels should be purged periodically and calomel given. The lactic-acid bacillus has done well in some cases. That it has not been more uniformly successful is probably due to inefficient emptying and disinfection of the bowel, and to the use of inert bacillary preparations. Galactenzyne is probably the most trustworthy.

THE TREATMENT OF ACNE

In the curing of acne systematic treatment is often of more importance than local treatment. To secure the best results, each case must be studied carefully, and all possible etiologic elements considered. Dr. Atchison Frazer (*St. Louis Medical Review*, March) says that the value of exercise in the open air, bathing and other hygienic measures cannot be overestimated, and that free bowel action [Meaning of course efficient elimination.—ED.] is absolutely essential. The diet should be regulated and only plain but nutritious food permitted. In dyspeptic patients bitter tonics may be indicated, in chlorotic and anemic patients, iron and arsenic should be given, although with great care, on account of the possible disturbing effect on the digestion. In strumous subjects it is often necessary to administer iodine.

The local treatment consists first and foremost in cleanliness, then in using mild antiseptic remedies.

HEXAMETHYLENAMINE IN CHOLE- CYSTITIS AND TYPHOID FEVER

According to Chauffard (noted in *Wien. Med. Woch.*, 1912, No. 21), hexamethylenamine gives excellent results, as an antibacterial remedy, in cholecystitis and in typhoid fever. As its elimination is rapid, it must be given in fairly large doses, say, in doses of 7 to 15 grains, with a daily limit of 30 grains. Undesirable by-effects are hardly observed, even after doses of considerable size, except for more frequent desire to urinate, or, rarely, hematuria and painful micturition.

TREATMENT OF GENERAL PARALYSIS BY SODIUM NUCLEINATE

N. Yourman (*Roussky Vrach*, noted in *La Quinzaine Thérapeutique*), of the military hospital in St. Petersburg, observed good effects from subcutaneous injections of sodium nucleinate solution, in doses of 30 to 45 minims once a week, in cases of general paralysis. Of 17 patients treated in this manner, 4 died and 6 were not improved, all ten having already been in a very advanced stage; but in the remaining 7, Yourman observed a more or less decided improvement. In fact, in 2 of the cases the author would be tempted to assert a cure, were it not for the rather short period of observation. The 7 patients in whom improvement followed the administration of nuclein had tabes. The total number of treatments varied from 6 to 27, according to the severity of the disease, and were well borne. In only one instance an abscess formed at the point of injection.

THE SUBCUTANEOUS INJECTION OF HUMAN BLOOD IN HEMORRHAGE OF THE NEWBORN

A. W. Myers reports, in *The Archives of Pediatrics* for March, the case of an infant in which, 32 hours after birth, large bloody stools were expelled, accompanied by vom-

iting of considerable quantities of clotted blood. Bleeding persisted for several hours, the baby failing rapidly. When the child was two days and eight hours old the doctor drew three cubic centimeters of blood from a vein of the mother's arm and quickly injected this into the subcutaneous areolar tissue of the infant's buttock before there was time for the blood to coagulate in the syringe; and he administered a second similar injection four and one-half hours later.

The doctor attempted to obtain a larger amount of blood, but, owing to coagulation, succeeded in injecting only 5 cubic centimeters. Nevertheless, this small quantity proved sufficient, there being absolutely no more bleeding or vomiting, while the subsequent stools presented the typical meconium character, and these gradually changing to the milk-stool appearance in a few days.

INTRAMUSCULAR INJECTIONS OF DEFIBRINATED HUMAN BLOOD IN PERNICIOUS ANEMIA

P. Esch (*noted in Wien. Med. Woch.*, 1912, No. 21) reports a case of pernicious anemia after labor, in which the threatening symptoms of dyspnea, vomiting, and so forth, ceased after a single injection of defibrinated human blood. After a total of 149 Cc. (5 ounces) of the defibrinated blood had been administered in the course of two weeks, the hemoglobin-content had increased from 25 percent to 50 percent. The author mentions that he has also seen favorable results from such injections in two cases of anemia in patients suffering from myoma.

POTASSIUM NITRATE IN MEASLES

Ferrer, of Valence, has returned to potassium nitrate as his remedy in measles. He pronounces this salt antitoxic, lowering fever, rapidly modifying the exanthem and causing the same to give way no less promptly; preventing and avoiding the complications—cerebral, pulmonary, and intestinal—induced by the morbillous virus. Complications due to microbial associa-

tions are rare when this medicament is employed early, but if they have already appeared it is powerless. The dosage he employs is 30 to 90 centigrams during the 24 hours, divided in three or four doses, for a child of one year or more. Having never noted disagreeable effects, Ferrer believes these doses might be increased. Given early, potassium nitrate aborts measles; it may even possess some prophylactic value, although not so positive as a previous attack.

Not one case of relapse occurred among children treated with this remedy. This drug might be tried in alternation or in association with calcium sulphide. Intestinal cleanliness, of course.

OBVIATING COLIC IN HIGH COLON FLUSHES

Dr. Arthur Zimmer says, in an interesting paper on the treatment of enterogenic diseases (*Wien. Med. Woch.*, 1912, No. 20), that colicky pains, which are occasionally observed on administering high colon flushings, never occur if care is taken to have the water sufficiently warm (say, at about 34° R., or 109° F.).

HOW TO PREVENT THE POSTPARTUM "HIGH STOMACH"

Much may be done for the prevention of "high stomach," following childbirth, if the gravid woman is advised to wear an abdominal binder, a properly fitting maternity corset, low-heeled shoes, and to pay attention to the bowels. Low-heeled shoes, especially, should be worn during pregnancy, because the increasing size of the uterus tends to pull the trunk forward and the woman throws her shoulders back and straightens her neck (which makes a sharp angle in the middle of the back; then, if, in addition, she wears high heels, the trunk is pushed still further forward and the head and shoulders must be thrown still further back (making a sharper bend in the lumbar region), this causes pain in the back and a bearing-down sensation in the abdomen. This is the opinion of Dr. Maude Taylor. (*Iowa Medical Journal*, 1912, Jan. 15.)



A Physiologic and Clinical Study of Boldine

BOLDO is an evergreen shrub native to Chili, and it was first described by Molino, in the year 1782, under the name of *peumus boldus*. It was successively named *ruizia fragrans*, by Ruiz and Pavon; *peumus fragrans*, by Persoon; *boldea fragrans*, by Jussieu; *boldea fragrans*, by Endlicher, Lindley, and Claudio Gay; while M. H. Baillon, in his history of plants, gives it the name of *peumus boldus*, which name now is the accepted one.

Boldo was brought to France in 1868-9 as a result of the discovery that it had certain curative properties in diseases of the liver; properties we have often mentioned.

The active principle of boldo, boldine, was discovered by Ed. Bourgoïn and Verne, and was studied out by Molino, Ruiz, and Pavon, by Jussieu, Endlicher, Lindley, C. Gay, de Candolle, Baillon, Laborde, and others.

Boldine is derived from the leaves of boldo. They are coarsely pulverized, then exhausted by an infusion of water to which is added 30 Grams of acetic acid per kilogram of material. The filtered liquid is then evaporated, in a water-bath, to the consistency of honey. This liquid is acid and contains, besides the alkaloid, some aromatic matter and calcium acetate, which are gotten rid of by various manipulations, the final result being a strongly alkaline residue of a peculiar odor. This is impure boldine in solution. It is purified by a number of precipitations from solution in water acidulated with acetic acid, precipitation being effected with ammonia, which must be added cautiously, because boldine is soluble in an excess of the alkali.

This product, which is almost pure, is then washed upon a Berzelius filter with distilled water till the last trace of ammonia is removed, then dried away, under exclusion of air and light under a blue glass bell which holds some quicklime and monohydrated sulphuric acid.

Boldine is an alkaloid which is only slightly soluble in water. It is very soluble in alcohol, chloroform, and in concentrated alkalis, and slightly soluble in benzol. It combines readily with acids to form solutions which are neutral to litmus paper, and which precipitate with ammonia, with the double iodide of mercury and potassium, and give to iodized water a maroon-brown precipitate. Concentrated nitric and sulphuric acids color it red immediately. It forms a white powder, slightly yellowish. In spite of its very slight solubility in water, boldine communicates to it an alkaline reaction and a decidedly bitter taste.

[It will be a matter of interest to our readers to learn that boldine hydrobromide, a pure water-soluble salt of boldine, has been produced in the laboratories of The Abbott Alkaloidal Company.—ED.]

Physiologically, boldine acts as an excitant of the digestive functions and of the biliary secretions. It is really the liver on which its action is specially localized, while at the same time it acts equally on the digestive functions. Moreover, beyond its direct action on the stomach, boldine is essentially a physiologic medicament, for, being endowed with such great efficacy on the liver's functions, it must contribute strongly to heighten the digestive functions by the fact alone of its direct action on the

liver without calling in the aid of the stomach's action indirectly.

From the physiologic study of Dr. Laborde on boldo, it was learned that this substance exercises, on the nervous system, a hypnotic action primarily, with all its consequent momentary suspension of conscious functional actions of life and its relations. This action is accompanied by a certain degree of general anesthesia and that of some of the senses, especially of those of audition, and the abolition of the oculo-palpebral reflex.

We have stated that, from a physiologic view, boldine increases the secretion of the bile. But from a therapeutic point of view, the action of boldine is not limited to that alone. Its action is wider and better than merely activating the biliary secretion, for it really acts in the manner of a specific regulator of the liver's functions, in that it even regenerates, so far as possible, those hepatic cells which have not as yet degenerated irremediably.

The action of boldo on the liver, known for a long time in Chili, was confirmed in Paris and in Vichy, principally by Prof. Gruber, who obtained with it remarkable results in hepatic congestion and functional troubles of that organ in hepatic colics, in biliary lithiasis, in chronic hepatitis, in bilious affections, and in cachexias of paludic origin, and after long residence in hot climates.

Through the same action which boldine exerts on the liver, it also has a stimulating effect on the entire economy. Its curative effects in inflammation, in congestion and functional troubles of the liver, in biliary lithiasis, in hepatic colic and, above all, in chronic hepatitis, are at present so well known and well defined that therapeutists of modern times would not hesitate to class it as the most energetic cholagog. It is a most valuable medicament in the treatment of diseases of the liver and of the digestive apparatus. As an aid to the functions of nutrition, it can be prescribed for a long period without inconvenience, because it offers the great advantage of not irritating the digestive tract as quinine would.

From Dujardin-Beaumetz we know that boldine increases the elimination of urea

in a notable degree, and that it especially augments the secretion of the bile without any action on the circulation, the temperature or the quality of the urine. That which gives to boldine a place by itself apart in therapeutics, is just this property that it does not confine itself to a mere augmentation of the biliary secretion, but acts, in addition, in the way of a veritable specific on the liver, modifying rapidly its pathologic condition and changing it gradually to a normal one. This first effect of boldine, that is, this considerable increase of the biliary secretion, determines, as a secondary consequence, the decrease of the hepatic congestion, which disappears, little by little, as the functional disturbances of the liver diminish and give place to normal functioning.

In his clinical therapeutic lectures, Dr. Dujardin-Beaumetz advises boldine in biliary lithiasis and in hepatic congestion. The various authorities allow us, therefore, to assign definitely to boldine a place apart as a sure and efficacious remedy in affections of the liver, in hepatic colics, and in the hepatitis of hot climates.

Besides its specific action on the liver, boldine exercises also a favorable influence on the functions of the digestion, acting as a tonic bitter principle. This, however, we think, is due, above all things, to the improvement of the digestive tract consequent upon the principal action of boldine on the liver.

The best mode of administering boldine is in the form of granules dosed at 1 milligram. The usual dose varies between 6 and 8 milligrams—and ought not to be, at the start, more than 6 granules—in twenty-four hours, but which may be increased to 10 within that period. In the treatment of affections of the liver and of the intestinal canal, this dosage should be sufficient for the twenty-four hours, i. e., it should be given fractionized at 2 granules at a time.

Managed wisely and perseveringly, boldine proves itself, in the hands of intelligent practitioners, as a specific in the affections of the liver, of so much value that the other remedies in vogue in the same affections are, without boldine, of very limited value. Boldine is an antidote in disease of the

liver, as quinine is an antidote in fevers.—*Revue Thérapeutique des Alcaloides*, March, 1912.

PASSAGE OF BILE INTO THE ABDOMINAL CAVITY

Dr. E. Von Kutschera reported a case of the escape of bile into the abdominal cavity without perforation of the bile passages, to the Gesellschaft der Aerzte, of Vienna, at its session of March 15, 1912. This condition was found in a man, 22 years of age, who was brought to the hospital with a diagnosis of appendicitis. His temperature was 36.5° C. (97.6° F.), and pulse, 47. On laparotomy being made, bilious fluid was found in the abdominal cavity, but perforation of the biliary passages could not be discovered anywhere. The bacterium coli was found in the fluid. The bile must have exuded through the sound wall of the gall-bladder during the septic stage of the fluid. Ten cases of this kind are recorded in medical literature; in five, the persons died. Bradycardia already was present in the present case before icterus could be detected.—*Wiener Mediz. Wochenschr.*, 1912, col. 861.

PHLEGMASIA ALBA DOLENS

F. Tremoliers, of the Hôpital Beaujon, studied out the origin of a case of phlegmasia alba dolens occurring in a young female of tuberculous antecedents (repeated bronchitis, coxalgia). The right thigh was swollen and the collateral venous circulation was quite considerable, and the thigh was very painful. It was, therefore, a clear case of phlebitis. On examining the patient, a small superficial cavity was discovered in the right apex of the supraspinous fossa. The patient also presented signs of chlorosis, the characteristic color of the skin, extracardiac murmurs, rattling noises in the right (upper) jugular angle, and so forth.

The question was whether the phlebitis with which this patient was affected was of chlorotic or of tuberculous origin. The existence of chronic noninfectious phlebitis which is due to some physical modifications of the blood or to abundance of hemato-

blasts is very much disputed. What we had here was rather a tuberculous phlebitis; not one that is due to a Koch bacillus (a variety well studied out by Hirtz and his pupils), which is attenuated, insidious, characterized by but few signs, and giving no rise to emboli, but a phlebitis of the third period, due to microbes of a secondary infection coming from the pulmonary cavity in this patient. A blood-culture, furthermore, showed the existence of staphylococci in the blood. This laboratory research confirmed the clinical diagnosis.—*La Quinzaine Thérapeutique*, March, 1912, p. 32.

"TABAKOLOGIA MEDICINALIS"

This is a literary study about tobacco in its medical respect written by Dr. Johann Bresler, and published by Marhold, at Halle. The first part of this publication issued, which is planned on a large scale as a collection of medical literature concerning the effects of tobacco in physical and psychical respects, is not a polemic against the use of this plant, but occupies itself with the hygienic consequences of its use. The theme of this number concerns itself with psychical and nervous diseases of the eyes, ears, blood-vessels, and heart, also those of the digestive canal arising from the use of tobacco, being illustrated by comprehensive histories of cases.—Dr. V. Horarka, in *Wiener Mediz. Wochenschr.*, 1912, col. 870.

YOHIMBIN FOR INCONTINENCE AND STRANGURY

Fritsch (in *Deutsche Med. Wochenschr.*, 1911, No. 27), writes as follows: There are certain disturbances of the urogenital system which arise from a defective functioning of the bladder-musculature and its adnexa, and which lead to incontinence of the urine, to strangury, and so forth, which disturbances have hitherto found but little attention. The urogenital apparatus forms, with respect to its innervation, a connectedly complete whole. This being so, Fritsch made use of yohimbin (Spiegel), which hitherto has been used in impotence mainly due to other ailments of the uro-

genital apparatus. In giving one tablet of yohimbin (of about gr. 1-12) a day, strangury and incontinence abated. Disagreeable side-effects have not appeared.—*Wiener Mediz. Wochenschr.*, 1912, col. 870.

GENERALIZED ZONA

We are but little decided as yet on the real nature of zona. According to Landouzy, zona is an infectious disease localized in the nerves. Nevertheless we are in the habit, for the purpose of facilitating a clear understanding, to circumscribe it from a clinical point of view. It is thus that we consider it a nonrecurring idiopathic zona which has features in common with other eruptive fevers; and this, again, we distinguish from sympathetic zona, that can recur and can arise from either some traumatic nervous lesion, or from inflammatory alterations, or from disease of some nerve-center, or from some medicinal poison, or from some specific infection, as from grip, tuberculosis, pneumonia, and so forth.

The eruption of zona is ordinarily characterized by its systematic unilateral distribution, corresponding to the territory of some one sensitive nerve or its anastomoses, respectively, as intercostal, cervical, facial or ophthalmic zona.

Noble reminds us that the clinical picture of zona is not always the same. He mentions an old man of 74 years of age (*Wiener Klinische Wochenschrift*, 1911) who presented a case of dorsobrachial zona whose typical eruptive elements have spread over face, neck, trunk, and thighs. The eruption was in the form of bullæ of the size of a shot or hempseed and contained an exudate that was either a bluish-black color or turbid, or hemorrhagic, or else the eruption consisted of miliary vesicles. The bullæ and vesicles were surrounded by erythematous areoles intermingled with small dark-brown scars corresponding to the eruptive elements that were on the way to cicatrization.

According to Noble, we have here a form of herpes zoster with an exanthema and a disseminated hemorrhagic and gangrenous eruption. It must be added that the exanthema and the eruption were preceded

by certain prodromata, such as a slight initial fever, depression, and violent neuralgic pains, some five days before the appearance of the zona, which lasted only about two weeks.

The systematized and localized eruption of a zona may, therefore, be considered at times as a cardinal phenomenon or as a primary lesion susceptible of being multiplied into a zosteriform dissemination.

It would seem that this present case might come near being a trophoneurotic dermatosis; and in this sense there has indeed been described an atypic gangrenous zoster—frequently of hysteric (?) origin—which certain authors still designate as bullous and gangrenous trophoneuroses. But, generally speaking, the dissemination in this group of dermatoses has its origin in some kind of traumatism and does not differ far from any zona which is more or less necessarily systematically arranged as in Noble's case, which is characteristic of its kind.—L. E. Perdrizet, in *Paris Médical*, 1912, p. 498.

REMOVING COMEDONE SCARS

In a twenty-four-year old man there were numerous deep cicatrices in the face, from 1-4 to 1-2 centimeter (1-20 to 1-5 of an inch) deep, which remained after infected and necrotic comedones. Wochenfuer, of Berlin, tried fibrolysin in this case. In two months twenty injections were made, twice weekly, into the muscles or under the skin. On the third month from the beginning of the treatment a substantial flattening of the pits and a change of the cicatrices became noticeable, especially in the deepest pits. The apparently bloodless connective tissue, which had a sallow color, was loosened up and became more sanguinous. By degrees all the cicatrices became flatter and the flesh color more vivid. After a cessation of four months in the treatment it was again resumed, and at the end of this course the cicatrices, although they did not disappear altogether, yet were so much better that they did not disfigure and the face no longer gave a repulsive impression, as before.—*Wiener Klin. Wochenschr.*, 1911, No. 45 in *Pharm. Zentralh.*, 1912, p. 267.



The Prevention of Shock and Vomiting from Chloroform Anesthesia

MARCH 24, 1899, I resorted for the first time to the use of cocaine, painted on the nasal mucous membrane, to prevent vomiting during chloroform anesthesia. It acted very nicely, preventing the vomiting in nearly every instance, although some of my patients had nearly died from vomiting in previous operations. My opportunities were quite limited, but, in a short article in the July, 1903, issue of *The Denver Medical Times*, I called attention to this use of cocaine as follows:

"Meyer and Prebrium, in 1873, showed that gastric irritation inhibits the heart's action. Guirni (see *J. A. M. A.*, May 2, 1903, p. 1210) has observed 'that irritation, which may arise from irritation of mucous membranes and affects the pneumogastric and other nerve-filaments, is strikingly observed when the nasal mucous membrane is irritated, and may cause an inhibition of the heart action.' If this be true, can we not, by obtunding the sensibility of the nasal mucous membrane and thereby removing this source of reflex irritation, not only greatly reduce the frequency and severity of the vomiting but also the danger of cardiac and respiratory failure as well as the shock resulting from operation?"

In 1904 I anesthetized a patient who had a weak heart, and who had been told by a number of physicians that she could not safely take chloroform. To fortify the heart, I gave her, before the operation, 8 drops of adnephryn solution (1:1000) and also painted the nasal cavities clear back to the throat with cocaine—i. e. 10 grains

dissolved in 1 ounce of a 1:4000 solution of the adnephryn. She took the anesthetic very nicely, without any heart failure, weakness or shock of any kind, and made a prompt recovery.

Since that time I have always employed this same preparation in those cases in which I administer chloroform. I have given it in more than 100 cases since that time, and I have never seen any bad result; there have been only a few instances of vomiting, and recovery has been prompt and satisfactory.

In some cases a one-percent solution of cocaine has been used. Anyone who will use this solution, as just described, and will apply it thoroughly, noting how it dilates the nasal passages, how much more freely the patient breathes after its use, and how much better the general condition is with it than without its use, will not fail to employ it after that.

While I have not been able to give the specific reasons for this reduction of shock and the general well-being following operations, I have been firmly convinced that these are facts, and have on numerous occasions called attention to them at medical-society meetings and elsewhere. While some physicians have manifested considerable interest in the method, others have received it with that supercilious toleration which some so-called "great men" are prone to bestow upon any unusual suggestion.

In view of the facts here set forth, it affords me a great deal of satisfaction to call attention to a paper read before the

Academy of Medicine of Paris (see *Journal A. M. A.*, p. 1211, April 20, 1912) on March 5, 1912. In this paper, prepared conjointly with Drs. Herrinschmidt and Beauvy, Prof. Delbet shows that chloroform produces pronounced changes in the suprarenal glands, changes of which the article in *The Journal of the American Medical Association* speaks as follows:

"Without intending to attribute all the sequels of chloroform anesthesia to alterations of the suprarenal glands, Dr. Delbet is thoroughly convinced that certain of these sequels are due to these alterations, and that it is possible to diminish or avoid them by reinforcing the insufficient suprarenal function by injections of epinephrin or of extract of suprarenal glands. There are, indeed, certain sequels which are entirely attributable to suprarenal insufficiency. Operative shock is one of these. It is characterized essentially by asthenia and weakness of the pulse, which are the symptoms of suprarenal insufficiency."

For ordinary operations Dr. Delbet injects 0.4 mg. (about 6 minims 1:1000 adrenalin or similar solution) before the operation, and in severe operations he uses 0.6 mg. suprarenalin, at one dose, or, if needed, repeats the doses until he has used 1 mg. in twenty-four hours. According to his experience with more than 1000 patients, epinephrin administered subcutaneously diminishes, and, in the majority of cases, entirely suppresses operative shock.

I am convinced that a free application of my solution to the nose, clear back to the pharynx, acts in the same way, but probably does not have such a pronounced effect. I shall be pleased to have physicians try my method and report results to me.

E. STUVER.

Fort Collins, Colo.

TREATMENT OF RHUS POISONING

Remedies that have been advocated for poisoning from rhus toxicodendron and other species of rhus are almost as numerous as the people that have been affected, and, as one contributor to *The Journal of the American Medical Association* says, the cure for this troublesome affection may be

described briefly as the last thing that has been accomplished.

The suggestion made by Dr. Berryhill, of the United States Navy, namely, to scrub the inflamed skin freely with a brush and hot soapsuds and then to apply alcohol, has been employed, with satisfactory results, by Dr. R. T. Morris, of New York, (*Journal A. M. A.*, Sept. 30, 1911), except that ether was used instead of alcohol.

In the same number of *The Journal* quoted, Dr. John C. Hemmeter, of Baltimore, advises first an alkaline hot bath, this to be followed by liberal rubbing with an ethereal antiseptic soap solution. Then the affected parts are bathed with 85-percent alcohol and gently dried. Since, however, the inflammation following ivy poisoning is due, not alone to the irritation of a volatile oil, but, at least in all severe cases, are mixed skin infections due to an invasion of bacteria after the poisonous oil has penetrated.

For this infective, secondary, condition, Dr. Hemmeter applies the ointment of yellow oxide of mercury, to which he adds basic morphine, 4 grains to the ounce. These two applications are to be made in the morning. The distressful itching is relieved and the discharge dried up by an ointment composed as follows: Bismuth subgallate, drs. 5; solution of epinephrin (adrenalin chloride) 1:1000, m. 100; lanolin, dr. 1; white petrolatum, enough to make oz. 1. This is to be rubbed in liberally at night-time and dusted over with an antiseptic powder.

In a subsequent number of *The J. A. M. A.* (October 14), Dr. Addison W. Baird, of New York, refers to the investigations of Acree and Syme, whose treatment is probably the most rational one. The part affected is immersed in or freely bathed with a solution of potassium permanganate, as hot as can easily be borne; where the skin is broken, dilute (1 p. c.) solutions should be used, otherwise the concentration may be varied according to the location and condition of the eruption. Either a little dilute sulphuric acid or a solution of an alkali may advantageously be added to the permanganate solution; the oxidizing power being greater when the solution is acid. In rare

instances, when the poison has penetrated deep into the skin, the latter should be exposed to the action of the permanganate for a considerable time. The dark stain produced by the permanganate will wear off or it can be removed by vigorous scrubbing with soap; it can also be destroyed at once by means of a warm solution of oxalic acid—applied with due precaution.

The extremely rare cases of systemic intoxication, through entrance of the poison directly into the circulation, obviously require special constitutional treatment.

H. J. ACHARD.

Chicago, Ill.

FOR THOSE INTERESTED IN NEW MEXICO

For persons seeking health by a change of climate, New Mexico possesses some natural advantages which some readers may be interested to know about. The following, taken from a school geography, is an accurate description of the climate:

"The climate of New Mexico is unsurpassed for healthfulness and comfort, for, though it is as far south as the Carolinas, the height of the plateau and the influence of the numerous scattered chains of mountains prevent excessive heat and tend to equalize the temperature throughout the year. While there are no great extremes of temperature, the four seasons—spring, summer, autumn, and winter—are well marked. The air is pure, dry, and exhilarating. The excessive sunshine is so tempered that sunstrokes are unknown in New Mexico. Strong winds and occasional sandstorms appear in the springtime, but their force is so broken by the mountains that damaging storms and hurricanes never occur. The winds are usually local and of short duration."

All the conditions here enumerated combine to produce an almost perfect climate for invalids. The nights are always cool throughout the summer, thus being conducive to restful sleep. Persons arriving in New Mexico soon acquire the New Mexico appetite and digestion that require no tempting dainties to induce the invalid

to eat. Our climate has to its credit many cures of tuberculosis, asthma (the writer among others cured), chronic catarrh, neurasthenia, atonic dyspepsia, chronic rheumatism, besides a host of ill-defined conditions of invalidism.

Having been, for forty years before my residence here, an active member of the medical profession, makes me fully aware that many people who need relief from disease are financially unable to take long sea voyages or to make sojourns to distant lands for health alone. It is, however, within the reach of many such to secure a home and business in New Mexico and thus regain health at a very small sacrifice, as many of those residing here have done.

WILLIAM TANNER.

Jordan, N. M.

[It seems rather out of season to talk about New Mexico. To speak the whole truth, Dr. Tanner's article was received during the winter months, but was pushed aside, as so many other articles have been, because space was lacking. Yet right now is a good time to consider the advantages of the Southwest—better now than to leave it until late in the fall.—Ed.]

HIS OWN SURGEON

In a German paper of recent date I read the following statement:

A few days ago a 26-year-old Roumanian physician, Alexander Fzaicon, in Paris accomplished a record in boldness and nerve power by performing a grave operation on himself. He had invented a new anesthetic, the application of which he calls "rachi-strychno-stovainization." This anesthetic leaves the patient perfectly conscious, while it produces absolute insensibility to pain. The discovery is to be the theme of a scientific dissertation, which the inventor intends to present at his final medical examination, to take place in a few weeks.

To prove the value of his preparation, he chose his own person. Fzaicon for some time had suffered from a hernia, which gradually grew worse and had to be operated upon. He decided to perform the operation himself under the influence of his new

anesthetic. With perfect calmness he applied it, placed himself on the operating table, began and finished the operation without the least sign of excitement, sewed up the wound, and went to bed. The operation lasted one hour.

This heroic deed of the young medicus, who is now on the way to perfect recovery, has caused a great sensation in Paris and is the talk of the day.

What do you think about that? Almost incredible!

BROTHER COSMAS, O. S. B.

Conception, Mo.

[Some "nerve" all right! The anesthetic is, however, not a new one. The Roumanian physician Jonnesco visited this country to demonstrate the rachidian (spinal) injection of stovaine for anesthesia. There were an alarming number of deaths, and now the method is little used.—ED.]

QUININE ERUPTIONS

Reading the article in April *CLINICAL MEDICINE*, by R. E. Davis, of Chihuahua, Mexico, on quinine eruptions, I venture to relate my own experience in this direction.

February 27, 1912, I was called to see a sick man. The patient was 40 years old, large, 6 feet tall, weighing about 225 pounds. He had been a hard drinker, having taken the "Keeley cure" twice—the last time about one month before this. He had not felt well in the morning and about noon had taken two tablets of bromo-quinine (containing about 5 grains of quinine). In about half an hour he began to feel shortness of breath and his skin became very red. At first there were small white pimples about the size of a pinhead, very close together, and with very red skin between.

I saw the patient about two hours after he had taken the quinine. At first glance, I thought he had scarlatina. He was very red from the top of his bald head to the soles of his feet. His face was swollen. His lips, nose, veins of forehead, and fingernails were blue. The pupils were dilated widely, the conjunctivæ congested. He complained of shortness of breath and at times would call for us to put him close to

the window, although the window was raised up high close to the head of his bed. At times he seemed delirious. I felt for his pulse, but could not detect the slightest pulsation. I auscultated the cardiac region, but could not hear the heart-sounds. His feet were cold, as was his entire skin.

I at once gave glonoin, 1-100 grain, ordering it to be dissolved under the tongue. This did not help. Then I gave 1-100 grain digitalin hypodermatically, without effect. Next, 20 drops of aromatic spirit of ammonia, repeated in twenty minutes, produced no effect. Then I tried the combination tablet of strychnine, atropine, and digitalin, but still there was no apparent change in conditions. Now I went to my office and got camphorated oil (3 grains in 30 minims of olive oil) specially prepared for hypodermic use. This I injected into the leg, and in fifteen minutes the pulse began to come at the wrist, and in half an hour the man felt about all right again. I gave him a purgative, and at 9 in the evening I saw him up and reading the paper. The redness of the skin was all gone.

Will someone please explain why the skin was red and, yet, cold? Also, why the skin was congested, yet no pulse could be felt at the wrist? This man gave the history of two similar attacks caused by quinine, during one of which I saw him about six years ago. At that time I attributed it to "bad whisky," but this time it could not have been caused by that.

H. W. SHERWOOD.

Doland, S. D.

[Extremely interesting. Many of these cases of drug-idiosyncrasy show a striking resemblance to "serum-disease," or anaphylaxis. Perhaps when we understand the latter better we shall know more about the former. Dr. Sherwood's experience in treating this condition should be helpful to all of us.—ED.]

OBSTETRICAL PRACTICE IN KOREA

A native Korean man and a woman, each carrying a paper lantern, came to my door about 6 o'clock one morning and asked for

the "wee-won," that is, the doctor. This is the story they told: The baby came at 8 o'clock this morning, but the "afterwards" had not yet come. The mother had not watered since morning, and the mother was all swelled up. Would the "wee-won" come and put new life in her? It is away up on the mountain and no "rik-sha" can go there; but would the "wee-won" come?

I sent them away and told them that, if in two hours conditions were the same, and they would come for me again, I should go. Before I had finished my dinner they were back. I put on my great-coat, tied a Japanese scarf about my head—it was bitter cold; gave my obstetrical bag to the man with the paper lantern, and we started. Passing out of our compound gates, we went westward for a short distance, then turned down a narrow passage called a street. On and on I followed that paper lantern. Snow was gently falling. The smoke from the low flues filled this narrow street and smarted the eyes. Now the lantern was waiting for me to catch up. On we went, winding in and out among the houses. Not a sound to be heard, save now and then the cry of a baby from behind a stone and mud wall. Still on, across open sewers, over stone bridges—oh, should we ever get there!

At last we came to the door of the hovel. Men first, always, in the Orient. So the man with the lantern opened the great front door of his home; and its loud creak announced our coming. We passed through a small entrance, across an open court, to some stone steps and a sort of open porch. Here I took off my coat, gloves, scarf, and shoes, giving them to a woman. I then opened a door made of slats of thin wood and paper and entered the sick-room.

In this room, besides the patient and the new baby, there was another child about two years old, two women, and much soiled clothing. Along one side was a row of wooden trunks piled to the roof. A Japanese "he-ba-chi" (brazier) filled with burning charcoal gayed off its devitalizing fumes. This room was the conventional size of the Korean room, 8 × 8 feet; I am 5 feet 9 inches, and I could not stand erect in it. On a low table near the patient was a brass

dish containing some oil and a twisted rag protruding from it: this furnished the illumination.

Going to work, I began to clean up the room, then called for hot water. Then I turned to my patient, who was sitting on a pile of dirty clothes. I found that to the umbilical cord they had tied a much-worn straw shoe. I rolled up my sleeves, put on an apron, took out a towel and spread on it my instruments, other towels, gauzes, cotton, soap, bichloride, lysol, and so forth. When the water came, I put a tablet of mercuric chloride into the basin and scrubbed my hands and arms to the elbows, all the time wondering what good this would do. Next I removed that shoe, scrubbed the woman, and then the floor under her and about her. Then I gave my patient a hot douche, catheterized her bladder, and then scrubbed her again.

While waiting for more hot water to be made, I instructed the husband how to administer a little chloroform. I carefully entered the uterus with my right hand and discovered that the placenta was attached firmly to the fundus; I had to pass my arm up to the elbow and to do curetting with my finger-tips. There was but little hemorrhage. I washed out the parts with lysol, packed them with sterile gauze, covered the pudenda with a large pad, and finished by cleaning up the woman. As I left, I gave them some soap and instructed them that she must have a bath the next morning in hot water, using the soap; for I think she had not had a bath since she saw the light of day.

Dripping with perspiration, I packed my bag. A woman brought me my shoes and coat. We stepped into the fresh air. How good it smelled! During the evening a snow had fallen and I could follow not only the lantern but also the foot-prints. Tired and chilled to the bone, I wended my way back to my compound. The next morning they came for me again, and I went and catheterized the woman.

That was the last I had heard from them till some two weeks later. I came into the kitchen from the hospital. On the middle of the floor there were a box of oranges and ten strings of eggs. The cook informed

me that the "baby's mother" was well and had sent these as a gift.

I have had many cases like this one—one, in which I was told the tail (placenta) had been in for fifteen days. It is wonderful the way these women recover. For, with all our care, having a very dirty patient on a mud floor, it is impossible to insure a perfectly aseptic condition. Yet I have not encountered even a single case where there was any fever afterward. I leave a good cathartic, a bar of soap, and instruct that a bath must be given the next morning. I attribute the rapid recovery to the patient's lying upon the hot mud floor.

MARY S. STEWART.

Seoul, Korea.

ACTINOMYCOSIS OF THE SKIN

In the May number of *CLINICAL MEDICINE*, page 473, we asked our readers to tell us of experiences with dermatic actinomycosis. Dr. E. G. Edwards, of La Junta, Colorado, has sent us a reprint of an article which originally appeared in *The Journal of the American Medical Association*, and from this we quote:

"The patient was a cowboy. The lesion had started as a hard nodule near the angle of the jaw, which rapidly increased in size to that of a filbert, and which at the same time showed in the skin covering it the peculiar dark-red color of actinomycosis. Several other nodules formed, and all, at the time the patient consulted me, were in a stage of softening and were discharging a purulent matter. The disease had been in progress some weeks and had been variously diagnosed and treated, but without success. Microscopic examination showed the ray-fungus to be present.

"Under chloroform anesthesia, every accessible nodule and sinus was opened, curetted, and wiped with pure phenol, followed, after the characteristic whitening of the tissues, with 95-percent alcohol. The dressings were ordered kept moist with 50-percent alcohol; and every other day, as long as the incised parts were open, full-strength iodine tincture was applied. No internal medication was given. The tissues healed readily inside of three weeks.

No return of the disease had occurred the last time the patient was seen, two years later."

QUADRUPLETS

Enclosed with this I send a photograph of a set of quadruplets whom I recently had the honor of assisting into the world—three boys and a girl, weighing respectively 3, 3 1-2, and 4 pounds. They were supposed to have been born at the eighth month.

I could get no history of a previous multiple pregnancy in this family. The parents were American. The mother, aged 29, had previously had four children, all of whom are living. Until a year or so ago, she had some kind of epileptiform attack at each menstrual period. About the time gestation began she attended a "nigger baptizing," at which about seventy-five of them were led into the water at one time, several of whom fainted with excitement. This made such an impression upon the woman that she firmly believed that her baby would be marked with black.

The labor lasted over twelve hours. At one time a leg, two arms, and a head were presenting, but the protruding limbs were replaced without any trouble, and after the next pain did not come down again. Two of the babies were attached to a single large placenta, each in a separate amniotic sac. The other two had separate small placentas. After the first one was born, the pains were so light that the other babies were delivered with some difficulty. The first, which was the largest, lived about four hours, the others only an hour or so.

Since these quadruplets were born, I have heard of a woman residing somewhere near Fulton, Kentucky, I believe, who gave birth to five, all of whom are said to be living. But the biggest baby-story in the world is probably that mentioned by Barnes (*"System of Obstetrics,"* p. 201), that of a Russian peasant whose "first wife had quadruplets four times, triplets three times, and twins sixteen times! . The second wife had triplets twice and twins six times," so that this patriarch had eighty-four living children, out of eighty-seven whom he had begotten!

With this exception, I have never read of any survivals where more than three were born at one time. I have never seen a set of triplets, but during the last two years have delivered five sets of twins, besides the quadruplets described above.

GEORGE D. MORGAN.

Lane, Tenn.

[Many physicians will remember the celebrated Ormsby "quads" born in Chicago about ten years ago. The mother



Quadruplets reported by Dr. George D. Morgan.

had had several multiple pregnancies prior to the birth of the four, and when these finally put in their appearance the husband left for parts unknown. He left at the wrong time! Mrs. Ormsby exhibited her children (all of whom lived and were in good health, for several years at least) in museums all over the country and accumulated thereby a small fortune.

The newspaper reports of five children at a birth are not always to be depended upon, as we happen to know. There was such a report from a little town in Indiana last fall. We wrote to one of the doctors at that place, who replied that he had *heard* of the case—but it was in the next county! We wrote to the county health office in *that* locality, who replied that the reputed mother of five had not yet given birth to her expected multiple offspring! After this experience we must treat the Russian report as does the man from Missouri! Even "textbooks" sometimes lie.—Ed.]

FOR RHUS POISONING

Use a solution of ammonium chloride, 2 to 4 ounces to one quart of water. Keep

applied with wet cloths, and renew every one to three hours.

W. A. BATES.

Purdon, Tex.

LOBELINE SULPHATE AND SODIUM NUCLEINATE

I have just been reading the articles in the 1908 and 1909 volumes of THE AMERICAN JOURNAL OF CLINICAL MEDICINE on the use of lobelia hypodermically. I tried the specific tincture several times, but it gave so much pain that I wrote to Lloyd Brothers for a preparation which would not be so painful when given hypodermically. They sent me a special tincture, which they thought would not be as painful after mixing it with water. However, this proved to give as much pain and soreness as the specific tincture.

Then, about a year ago, I ordered some lobeline sulphate. In reply, the jobbing house wrote me that they did not keep this article in stock, but would order it from Germany, and that it would cost 30 cents a grain. So I ordered 30 grains of it, and in about six weeks I received two glass tubes containing 15 grains each. The label stated that it was very deliquescent, a fact I had previously gleaned from Merck's "Index" of 1907.

With what little information I could get from this book about this powerful alkaloid, I began to figure out the dose. I made a solution of 1 grain to the ounce of sterilized water, and began giving 2 drops of this to a tuberculous patient, who came to my office every day to receive an injection. I increased the dose, until one day I "laid him out" for over an hour, and I thought sure he would die; but he recovered in about an hour and a half sufficiently to be able to walk home, some two blocks away.

At present my average dose is 1-96 of a grain of the lobeline sulphate, or 5 minims of the solution, for an adult; for children I use from 1 to 2 drops. This solution keeps well and gives no more pain than does a dose of morphine hypodermically.

Lobeline sulphate gives all the good effects that Dr. Jentzsch attributes to the specific tincture. I had 18 cases of pneu-

monia last winter and spring and I used the alkaloid in most of the cases with very gratifying results. All recovered. Most of them were children, one only ten weeks old.

I also used sodium nucleinate, 1 1-2 to 4 1-2 grains once or twice in twenty-four hours, injected hypodermically deep into the gluteal muscles.

I dispense my own medicines. I always carry with me a small weighing balance on which I can accurately weigh half a grain. I hold a teaspoon in boiling water for a few minutes, then weigh the sodium nucleinate, and dump it into the spoon, draw the syringe full of hot water and squirt it into the spoon, keeping the spoon warm by holding it in a cup of hot water while stirring the sodium nucleinate until it dissolves. It is necessary to have a 30- to 40-minim syringe and a large-sized needle.

I think I got quicker and better results by using the lobeline sulphate and the sodium nucleinate together.

In a few cases I set up resolution in forty-eight to seventy-two hours. At one time, a boy, eight years old, had been sick for two days, with a temperature of 104° F., pulse 160, respiration 43. I injected 2 grains of sodium nucleinate and 1-96 grain of lobeline sulphate, and resolution set up inside of fifteen hours.

The injection of sodium nucleinate is painful, and the site of injection will remain sore or sensitive for twenty-four to forty-eight hours; hence, in giving these injections, I alternate from one hip to the other.

Do not forget to clean out the bowels with calomel and podophyllin.

My routine prescription in pneumonia, for the last fifteen or eighteen years, is: Sodium salicylate (from oil of wintergreen), 3 to 5 grains; potassium citrate, 10 grains, in solution, every hour or two hours. I give strychnine for a stimulant when necessary. With the treatment outlined above, last winter, I had to use but very little stimulation. For the patient's sake, and your own, please don't use opiates in any form. Alcohol acts as a narcotic in a great many cases of pneumonia and is a detriment to the patient.

If I use anything locally, I apply a medicated glycerin plaster. This will stay

moist for thirty to forty-eight hours, and avoid disturbing the patient so often as with other applications.

A prescription in *Colorado Medicine*, 1907, p. 482, suggested by Dr. Carl Johnson, is a good one and I have used it very successfully in several, especially nervous, cases. It is as follows: Sodium bromide, oz. 1; fluid extract ergot, oz. 1; alcohol, oz. 1; glycerin, ozs. 2; water, enough to make ozs. 16. Dose: A teaspoonful every hour.

Every case has its individuality and the treatment must be for any symptoms peculiar to that case.

Tympanitis is a very dangerous complication and must be forestalled and treated by sulphocarbolates, either the sodium or zinc salt, or the two combined.

Now a word of encouragement to Brother Wm. C. Post, who writes in October (1910) *CLINICAL MEDICINE* in regard to calcium sulphide as an immunizing agent against scarlet-fever. I use it in every family where I have scarlet-fever to treat. Isolate your patient and saturate the other children with calcium sulphide, and four times out of five you will not have any other case to treat in that home. That at least has been my experience during the last eight or ten years. As a routine give your patient 1-2 to 1 grain of calcium sulphide every two hours.

For local applications in your scarlet-fever cases, use oil of eucalyptus, dr. 1; vaseline, oz. 1. Anoint the patient all over once or twice a day.

JOHN H. FERGUSON.

Colorado Springs, Colo.

[On account of the pain attending the hypodermic injection of extemporized solutions of sodium nucleinate we now advise the use of the standard solution put up in ampules. This causes little discomfort, is reliable as to dosage, and is aseptic. The lobeline sulphate is procurable, at last, in hypodermic-tablet form.—Ed.]

BITTER CRY OF UNHAPPY OLD AGE

Out of the belly of hell I write unto thee. I have a widowed daughter and four selfish grandsons, proud, fairly gifted, who have been elevated from the bog by the sacri-

fices, self-denials, groans, labors, and tears of poor, saving, economic, penurious grandparents, and their grandsons, building on their savings, are proud, conceited and heartless. Their father left to the four \$60,000. My divorced wife will leave them over \$200,000. I have given them, so like a fool, most of my earnings, and am alone, uncared for, neglected, in my ninety-third year, full of rheumatism in feet, legs and knees, walk with difficulty with the aid of a cane, so full of acid that milk will sour if I go by it; torpid bowels, diseased and strictured colon; burning water and enlarged prostate. Do you want more reasons why I do not take the most excellent CLINIC?

I can't see to write, much less to read. I am stranded, without help, on the barren sands of age. A robin, blind on the tree, singing my death-note, while death with his deadly arrow and unerring dart is aiming at my vitals. Beauties of old age? Tell them to the devil, not to me!

I left you, sorrowing and full of tears, because I could not keep up. I am used up and in my ashes live only a trace of my ever feeble fire. I loved you and Waugh with paternal love, and hung upon your lives and venerated your writings. They were dearer to me than fine gold. I fell in the rear from necessity, the imperative demands of age. The few papers you have sent me have made my heart glad. Wonderful God-gifted men, how I love you!

My grandsons say truly my mind is failing. I have \$5000 to \$8000 left, and think I am *compos mentis* enough to make a will if I don't live to use it up.

My life has been disappointing to me, and yet I feel that I have done more good than harm. I have some learned friends who still notice me and treat me with respect, but my own relatives, my own family, do not and never have. The curse of God was upon our infernal marriage, and my daughter, sharp, keen, shrewd, smart, is a little selfish, unfeeling, heartless devil, caring only for herself, her four boys, and what her mother and poor father may leave her. Her mother is rich, yet she brought me not one cent, lived with me twenty-seven years, got all the gifts and results of my labors she could, robbed me of \$10,000,

and then treacherously, shamefully and infamously left me and downed me for incompatibility, after she had used me up and cooled her amorous fires.

O, God, I cannot write! It is too painful! You cannot read my scrawling and my eyes are blind with tears. I am full of uric acid, so I can never be cleared of it—never. It makes my water burn and scald, irritates the neck of the bladder, gets into the joints and muscles, causes lameness and weakness and stiffness of joints. I shall try to write you occasionally. Forget you? Never!

Think of my advanced age, my phenomenal feebleness and diseased condition from birth, and then say what you ought to expect of me now. I cannot need but very little—a poor, feeble, aged man. You and Waugh, in your prime, gifted, talented, able men, prodigies in your profession—and at my best I could not understand you and was not worthy to touch the hem of your garment. From one leg in the grave, and the knee of the other full of rheumatism, I send a hearty greeting. I have spirit and will-life, but no executing power—my spirit in a dead body. Notice me occasionally, and if you live to your ninety-third year, you will feebly understand my condition. This is my first letter after three weeks of confinement with rheumatism in my feet, eyes and knees—no redness, very little swelling of the knee. I call it uric acid. Am I right?

"*Ah me miseram in senectute!*" I have written a disconnected letter and in a very imperfect shape, but you will excuse my frailty and imperfection. The day is dark and stormy, light rain and fog, and my mind is boisterous, tempestuous, and so impulsive that I cannot find words to express duly my feelings; for my thoughts throb, jam and press each other in my brain like doves at the opening of their cote, pursued by a tornado. I am sort of wood-coal peet on fire and violently seeking vent.

Now write me kindly and tenderly and sympathetically, according to your noble, talented, gifted soul, and may God ever help you with His choicest blessings.

Your humble servant and sincere friend,

— G —

[The preceding letter is published, first, because it comes from an old friend with whom we sympathize deeply, and, second, because it gives a vivid picture of the mental state of unhappy old age. As such, it deserves the study of those interested in geriatrics. Yet we do not hold up our old friend's heart for dissection; rather we print this intimate outpouring, that others may get a glimpse of the inner struggles of those old men and women who feel that, after having fought bravely the battle of life, they are neglected and cast aside, as they approach the shadows, by those who should show them the most love and respect when "the evil days come."—Ed.]

THE BACTERIN TREATMENT OF PULMONARY TUBERCULOSIS

Dr. Geo. Sanders discusses the bacterin treatment in pulmonary tuberculosis, in *The Medical Record* of February 24. He was agreeably surprised in the results obtained with this mode of treatment. Although his cases have not been treated long enough to show definite end-results, owing to the benefits derived so far, their progress should, he says, stimulate general interest for the application of this therapeutic agent.

The doctor employed the following combination of bacterins: streptococcus, multivalent, 50,000,000; staphylococcus, multivalent, 500,000,000; *B. communis coli*, multivalent, 110,000,000; pneumococcus, 100,000,000—in each Cc. The dose injected is 1-2 Cc., and is thereafter increased or decreased according to the tolerance of the patient. "A slight negative phase following an injection seems to be followed by better results than if none appears."

We do not quite understand what the author means by the last sentence, which we quoted literally. A negative phase always follows the injection of a bacterin, or a toxin for that matter, and we suspect that the author means a reaction, which is not exactly the same as a negative phase. The negative phase, which was discovered and studied by Wright, is manifested in a lowering of the opsonic index and clinically means a period of increased susceptibility or of lessened resistance. We cannot, therefore, under-

stand how such a periodical decrease in resistance could be conducive to better results. It has, on the other hand, been asserted by several authors that they obtain better results from tuberculin treatment if they grade the doses so as to produce very mild reactions, probably because such doses would cause a slight stimulation of the tuberculous focus and of the process of immunization.

LOOPING THE LOOP IN UTERO

On April 19 I was called to a case of labor, the woman having been in labor for about four hours and the membranes having ruptured before my arrival.

I found a vertex presentation and a L. O. P. position. Dilatation was complete. The pains were far apart and not very strong. The condition did not seem normal and I asked the mother whether she had felt life within the last few hours, and she said she had. I could not detect the fetal heart-sounds at this time. I waited patiently for about three hours, when the pains came on better, and with a little assistance delivery was accomplished.

The child was livid and no pulsation was felt in the cord. I worked for several minutes trying to resuscitate the child, but there was no sign of life; otherwise the child apparently was normal.

When I began to tie off the cord, I discovered a plain single knot in the umbilical cord drawn up tightly enough to cut off completely the circulation. This explained the cause of death. The cord was very long, which had allowed the child to pass through a loop and when labor came on and the child descended, the knot was tightened, causing suffocation several hours before delivery.

C. O. NELMS.

Herscher, Ill.

HOMES FOR AGED PHYSICIANS

I want to express briefly my approval of your agitation for homes for aged and helpless physicians and their families. In this age of money-loving, in which people's desire to accumulate wealth is limited only

by the resolve to get as much as any other fellow ever got, there is slim chance for the needy to feel more than a faint show of charity. I want to endorse to the fullest the article, in the last *CLINICAL MEDICINE*, by Dr. Crothers, who always seems to be in the right, whether teaching science to the inebriate or charity to his fellow men. I believe the time is propitious for a few to lead off, in confidence of a ready following, to the attainment of one of the grandest undertakings for good, that has yet come to our race. I have personally known a number of hard-working, sober, and every way worthy physicians to come to their end scant of the necessary comforts, and I have a right to conclude that this was largely due to the fact of their unselfish lives.

The suggestion to combine each home with a large farm is an excellent one. An institution so situated, near a good town, could be made nearly self-sustaining, while at the same time affording the inmates such diversion as congenial employment would give them. No individual who has led an active life can be content without some occupation, as long as he can move. And, really, as a means of maintaining well-being, it is necessary. Bee keeping, gardening, and various indoor employments for all able to avail themselves of such, coupled with the gratifying of the various intellectual tastes, would fill a picture of a tempting home for the aged and needy. Let the good work go on.

It seems to me that every state in the Union should have one or more such places of refuge—then state-pride could be used as a worthy factor in doing good. Who will be the first to say, "Come on," and call for organization. Let Kentucky be the first.

R. E. McQUIDDY.

Lawrenceburg, Ky.

VALUABLE MEDICAL BOOKS

Dr. John Forrest, of Charleston, South Carolina, writes us that he is growing old and would like to dispose of his medical library. A list which he submitted to us, at our request, enumerates a large number

of valuable works that are, still, of decided use and importance, even where they are old editions. But the library by no means is an old one. Dr. Forrest has taken care to maintain it, and has purchased books of later editions and such others as deal with modern subjects, up to the present time. Any of our readers desirous of availing themselves of this unusual opportunity would do well to communicate with Dr. Forrest, whose address we shall be glad to supply. We have some copies of his medical catalog, and our librarian, Dr. Achard, will take pleasure in giving all possible information on the subject.

A POCKET-CASE FOR HYPODERMIC TABLETS

Tablets for hypodermic use, as carried in small tubes along with the syringe by most physicians, are very liable to be "missing" just when needed—and they are always urgently needed when needed at all. Moreover, the tubes being so small and the tablets fitting so tightly, one must sometimes break the tube to get a tablet.

About three years ago I took one of the "vest-pocket" granule-cases containing nine bottles, relabeled them, and filled them with the following selection—which I find meets practically every indication for this form of medication—viz., atropine, apomorphine, caffeine, pilocarpine, and strychnine.

I use a Luer all-glass syringe. This, having no leather packing, does not shrink and become useless, while it can be completely sterilized by boiling; thus making a thoroughly dependable instrument.

I do not think that I resort to the hypodermic mode of medication oftener than the majority of my professional brethren, but it is a great satisfaction to be able at all times to "deliver the goods" with absolute certainty and without vexatious delay. This I can do with the outfit described; and the extra case requires but very little room in one's pocket.

F. L. ROSE.

Jackson, Mich.

[We are glad that Dr. Rose has said a word about hypodermic medication. We

do not half appreciate its possibilities. Our veterinarian brothers, who have "good horse sense," and lots of it, resort to the syringe far more than we do, and they find that it pays. It certainly pays in emergency human practice—and every doctor should be prepared with *everything* in a medicinal line likely to prove useful in these emergencies.

But on one point we do not agree with Dr. Rose. We really can not approve of the use of the larger-size bottles, and for several reasons. First, manufacturers—the good ones—now take great care to produce hypodermic tablets in an antiseptic way. They are handled as little as possible in making, and they are examined by the bacteriologist after they are made, to be certain that they contain no germ colonies. What's the use of doing all this if the doctor is going to put them in a larger vial and pour them out into his hand or into any contaminated receptacle, again and again, before making his solutions?

Next point—the small tubes keep the tablets intact. In the larger vial or bottle they will inevitably become more or less broken at the edges (since they are necessarily very friable) and so the doctor does not get the full dose of drug, or at least will not know how much he is getting.

On the whole, it is our opinion (in which most of our readers will doubtless concur) that the tube containing twenty-five tablets is the best form for carrying these remedial agents. But have a good supply, buying several tubes of each important remedy at a time. Do not depend on atropine, morphine, and apomorphine alone. We like to have an assortment; something like this: atropine sulphate, apomorphine (alone or combined with strychnine), glonoin (alone and combined with strychnine), hyoscine, morphine and cactin, digitalin, ergotin, pilocarpine, strychnine, morphine and atropine, nuclein solution, and sparteine sulphate. With such a collection the doctor is prepared for almost anything—even if the hypodermic syringe has been left at home.

It is good practice to carry a small hypodermic case containing these things. One containing twelve vials, filled, can be secured for \$2 to \$2.50.

Perhaps *you*, Doctor, have a better selection. We wish you would tell us your preferences. This subject of hypodermic medication is a good one for us to discuss. Who will speak first?—Ed.]

MANAGEMENT OF FEEBLE LABOR-PAINS

Dr. R. Marek, in the *Wiener Medizinische Wochenschrift* for August 19, presents an interesting study on the treatment of insufficient labor-pains. He points out that these must not be confounded with the so-called pains of pregnancy which in this country usually are designated as false pains. Schatz, who studied these latter in detail, has shown that they occur in the majority of pregnant women periodically and that they usually can be observed in a definite type, that is, they occur every six, four weeks, or three weeks, or other period.

The further pregnancy is advanced, the more frequent the pains of pregnancy become, and toward the end of gestation each succeeding period of false pains occurs after an interval only half as long as the preceding one; that is, in the four-week type the pains occur 56, 28, 14, 7, 3 1-2, 7-4, 7-8, days before labor. In the six-weekly type they occur 84, 42, 21, 10 1-2, 5 1-4, 2 5-8, 1 15-16 days before labor. This periodicity is not absolute; one type may change to another and false pains may occur intermittently and between the periods.

If labor-pains have been found to be true labor-pains and not pains of pregnancy, and if they are too feeble to be productive of results, thereby uselessly exhausting the parturient woman, various means are at our command to strengthen and increase the uterine contractions.

For this purpose, Dr. Marek has used quinine in 126 cases, in which 74 were primiparas and 52 multiparas. The remedy exerted a satisfactory effect in 47 percent of the primiparas and in 73 percent of the multiparas. It was administered in doses of 1-2 Gram (grs. 7 1-2) repeated in half an hour or at intervals of 15 to 10 minutes. The maximum dose was three powders.

It is worthy of note that the remedy acted well in a greater proportion of multiparas than of the primiparas. In all favorable cases the good effects occurred very promptly, while it was not obtained in cases in which the uterine muscles had been unduly stretched for a long time. In most instances where the quinine was given for this purpose, delivery occurred promptly, sometimes in half an hour, and only rarely in more than one hour.

Another remedy, which has so far not been employed for this purpose, is berberine, which Kurdinowski had employed experimentally. Marek reports on 27 cases in which he administered the remedy for the purpose of strengthening inefficient labor-pains, 17 being primiparas and 10 multiparas.

With this remedy, berberine, the good effects occurred in a greater percentage of the primiparas, namely, 53 percent, while it was observed in only 25 percent of the multiparas. To be sure, the number of patients treated was not sufficient to enable the author to express a positive opinion. The berberine was also given in doses of 1-2 Gram, two or three powders being given several hours apart. Sometimes after one, sometimes after two powders vigorous pains occurred, which, in the favorable cases, were effective and led to spontaneous delivery in the course of 1 1-2 to 8 hours.

The berberine showed a particularly marked action in cases of painful but ineffective contractions occurring together with severe backache. In all these cases the backache soon disappeared and within one hour after administration of the berberine regular labor-pains occurred.

This is a very interesting communication, and it is to be desired that the efficacy of berberine be investigated further. We suggest that the remedy be given in 1-6- or 1-3-grain doses, every half or one hour until effect. We should be glad if some of our readers would make note of this and test the efficacy of the remedy in a series of cases of ineffective labor-pains and report results for the benefit of CLINIC readers.

Meanwhile, keep in mind the value of caulophylloid, which proves very efficient, not so much by energizing muscular action

as by relieving the sphincteric spasm, which causes the rigidity of the os, which so often causes trouble. These three remedies (quinine, berberine and caulophylloid) seem each to have its special indications.

DRUG AND LIQUOR HABITS

I presume many of the readers of CLINICAL MEDICINE are already acquainted with the prevailing opium- and liquor-habit treatments. For the benefit of those who are not, I will state that hyoscine hydrobromide is the antidote.

I commence the treatment by a hypodermic injection—given at 9 o'clock in the evening—of 1-100 grain of hyoscine, which usually secures sound sleep till morning. This dose is repeated again at about 11 next forenoon, if the patient becomes restless, and as often thereafter as there are signs of distress I repeat the dose, and even double it the second and the third days. The patient should be carefully watched during night and day. Delirium will be present during this treatment, but the patient does not realize that he is suffering. The use of the hyoscine is suspended after the third day.

At present, I give sulphonmethane compound or some other sleep-producing drug after the third day in order to insure sleep. Tonics should also be given now to restore the tone, strychnine probably being the best. I have often secured restful sleep by 1-32 grain of strychnine in depressed conditions of the nervous systems.

Do not give anything containing opium in any form. Keep the patient under observation until thoroughly restored to health and has good appetite and digestion. Control diarrhea with ginger or other simple means.

WILLIAM TANNER.

Jordan, N. M.

[The doctor's suggestions are excellent, but they should hardly be considered as a complete "treatment" for the opium or liquor habits. While hyoscine was advanced as a specific for morphine habitua-

tion some years ago, the experience of many men has shown that it is not a "specific," that it is not all-sufficient in itself, and it is not free from certain dangers. Most of the men who specialize in this line now add to the use of the hyoscine the most thorough *elimination*—especially through the bowels and skin—and to this add *support*, by the use of strychnine, sparteine, digitalin and other remedies, as advised by the Doctor. Dr. Tanner's ideas are certainly excellent in the main. Who will add something more about this subject. —Ed.]

VALUE AND USES OF COMMON SALT

It is strange, but nevertheless true, that some of the most important, but common, things frequently are overlooked. There are many good properties and uses of our common table salt, which the busy practitioner overlooks in his daily practice, that are worthy of mention and more consideration. Just common salt, or sodium chloride, has saved the lives of many people. It has produced good results in emergency cases in various ways. Especially can we make use of this valuable agent when no other more efficient remedy is at hand.

Some of the main physical properties of table-salt are: It is permanent in the air, odorless, forms hard cubical crystals, has a saline taste and a neutral reaction; it is soluble in about 2.8 parts of water at 59° F., and in 2.5 parts of boiling water. It is the most abundant sodium compound we have. It is obtained, for ordinary use, from seawater by evaporation, also from the solid rock-salt, as occurring in mines.

Common salt is a necessary part of the food of man. It is the most abundant air the saline constituents of the animal organization, existing normally in the blood, being supposed to keep the albumin and fibrin in solution. It is easily absorbed and excreted. If consumed in excess, it is said to increase tissue changes, bringing about a rapid excretion of urea and of potassium salts.

As a food, salt probably stimulates the flow of the digestive fluids. It is supposed to give strength and vitality to the entire

human economy. It raises the temperature, promotes the metamorphosis of tissue, and increases a number of red blood-corpuscles. The normal salt solution (6-10 of 1 percent, or about 1 dram in a pint of water) as a therapeutic agent, is now almost universally recognized. It has been employed with gratifying success in shock, or collapse, resulting from excessive hemorrhage, toxemia or other causes. Normal salt solution is now being administered very frequently by the intravenous, subcutaneous, and intra-rectal methods when conditions demand.

About one ounce of table-salt in a glass or two of luke-warm water will serve as a good emetic and produce vomiting in a few minutes, if no better remedy is at hand. In toxic doses of nitrate of silver, salt will prove a very efficient antidote. Some of our mineral and spring waters which are well advertised owe their virtue to the fact that their main constituent is sodium chloride and similar ingredients, disguised with certain palliative agents.

It has been and is being used with some success in intermittent fever. One teaspoonful before breakfast in a glass of water (hot preferred) will have a cathartic effect within a few minutes, usually without fail. In chronic constipation I prescribe this very remedy as part of the treatment, and it has given rather wonderful results. It is also very useful in making enemas. Dr. John William Fyfe recommends a strong solution of salt to be injected into the rectum for removing ascarides, and I know it to have done so. It is said to cure chronic conjunctivitis and is an excellent stimulating collyrium, also one of the best remedies for disease of the canaliculi and lacrimal sac.

Locally, salt has a cleansing and pleasant influence on mucous membranes. I had good success in treating a number of cases of leucorrhea and other uterine and vaginal discharges, with solutions of salt, although we have a number of other efficient remedies for such abnormal conditions. It is used with favorable results as a nasal douche, stronger solutions being used for a gargle in pharyngitis, tonsillitis, and so forth. It may be employed as a stimulating wash for various external lesions. Much more can be said in favor of this simple yet

valuable agent. It should be administered whenever indicated.

SIMON L. KATZOFF.

Atlanta, Ga.

HOW CONTAGION MAY BE CARRIED

Your correspondent Dr. Hopkins, in his article in the June *CLINICAL MEDICINE*, on "Preventing the Spread of Tuberculosis," calls attention to one very important fact in regard to the dissemination of tuberculosis, that often is passed over far too lightly and carelessly. The practice, so general, of retaining many articles of wearing apparel and the bedding used by tuberculous patients should be discouraged, in fact should be prohibited. Such articles should at least be thoroughly disinfected, and what would be still better, destroyed, as is done in cases of diphtheria, scarlatina, smallpox, typhus fever, cholera, and so forth. How many times we can recall instances where the members of large families have been carried off, one after another, by this "white plague" or scourge.

Referring to diphtheria, I recall one instance where a lounge was loaned to accommodate attendants who were nursing cases of diphtheria in a neighboring house; this lounge, though it had been used in a room remote from the sick, was not returned for several weeks afterward, yet it contained still the diphtheria infection, which invaded the owner's family with fatal results.

Another source of infection is from wall-paper in living and sleeping rooms. No amount of chlorine gas, sulphur fumes or formaldehyde will disinfect wall-paper and paste, especially when there are several layers of paper, one over another on the walls, as I have noticed at times. The old-fashioned whitewashed walls, so generally in vogue in former years, were excellent from a sanitary point of view.

Still another source of infection is the house-cat, a danger little suspected. I recall one case in particular where I, as health officer, had taken possession of a vacant house for a "pest-house," remote from the highway and from any neighboring dwelling, and installed a family, one of whom was ill with smallpox. Within

twenty-four hours thereafter a cat that had been with the former occupants appeared and on one of my visits I found it on the bed with the patient. I had the cat despatched at once. While flies and mosquitoes are unquestionably a dangerous factor in the dissemination of infection, the ordinary domestic cat is no less so in many cases, though unsuspected.

In some cases of yellow-fever that I had in a vessel at quarantine at Stonington, in 1872, among the crew in the fore-castle, in removing the patients to a canvas tent on deck, a cat accompanied them. The captain and mate demurred at having the cat in the cabin, and it was consigned to the briny deep.

G. D. STANTON.

Stonington, Conn.

[The doctor's suggestions for limiting the dissemination of infectious diseases by a more thorough disinfection than is usually carried out are excellent, and he has pointed out the sources of the greatest danger very correctly: bed-clothing and wearing apparel, then the hangings, wall paper, and other belongings of the sick-room, and finally the family cat or other pets; these should all be destroyed if at all possible, and, if not, they should be disinfected thoroughly. The best disinfectant at our command (sometimes!) is direct sunlight. If a bedroom has a southern exposure, not obstructed by trees, and if it can be spared for a few days, it can be locked up, with open windows, and the disinfection can safely be left to light and air.

Wall-papers are now made so that they can be washed with disinfectant solutions, and these should be adopted in all cases where the walls cannot, for some reason, be left simply calcimined; but the latter mode of finish is by all odds the most hygienic, even if not the prettiest.

It goes without saying that all the furniture must be thoroughly disinfected, and that upholstered furniture should be discarded if possible. If not, the upholstering should be taken out and exposed to air and light by an immune person. Anything that can be washed or boiled need not be

discarded, since it can in this way be rendered perfectly innocuous.

I hope the day will soon come when pet animals will be relegated to their proper places (I owe a special grudge to a certain black Tom!). They have one and all been convicted of having spread infection in one way or another, from pussy and doggy down to the merry little canary birds. Animals belong in the barn and the yard, and they have no place in a clean home. By all means, get rid of them. If this is cruel, make the most of it, but don't endanger the life of your child, and that of your neighbor's, for the love of kitty.—Ed.]

A WORD FOR THE YOUNG PHYSICIAN

It is a lamentable fact that the young physician, when he secures his diploma and perhaps a little hospital experience as interne and starts out for work, is more or less a subject for criticism. If he makes a mistake, as the very best of us is liable to do, it is rather to be expected and not much to be wondered at that it is repeated. If he does an extra fine piece of work, as any matured and experienced physician or surgeon could do, he gets the credit of doing very well for a young man (just happened to). If he is wide-awake, off in a jiffy and driving his work before him, he is showing off like a kid. If he is slow and measured in his manner, he will never amount to anything, going at that pace.

True, there are those who will pick up the doctor, preacher or any other new man and make so much of him as to do them more harm than good; but the general tendency is to be critical and suspicious, until, by perseverance, general stick-to-it-iveness and hard knocks, the young physician has established himself on a firm footing—and often it is the hard knocks that spur to action, thus helping to develop the true mettle that otherwise might lie comparatively dormant.

There are those possessed of a sort of magnetism—a pleasing personality we may call it—that gives them a place and makes them welcome alike with the aristocrat or peasant; and there are those just as good, honest, true, and perhaps more capable,

but lacking somewhat in personality, who may take more time in finding favor, but ten chances to one, he will have a stronger hold on the people when he once gets established, because they have found in him what they did not know was there. There is a certain quiet eloquence about that person who proves himself a little larger, broader, and more intelligent in



Dr. William M. Dent, Newberry, W. Va. Taken on his eighty-first birthday, on retiring from practice, after fifty years in the harness.

word and deed than his appearance would indicate. This applies to all conditions, and the young physician stands an equal chance with those of other professions.

It is well for a young doctor to cultivate a smooth, tender, sympathetic bearing, but at the same time avoiding palaver and affectation. Coarse, vulgar or profane language is about as unbecoming a doctor as in a minister, and not an accomplishment anywhere.

A man may be skilful, and become widely famous in his calling, with profanity in his mouth, but one is reminded of an elegant piece of goods that would be perfect beyond any question, only for a few damaged spots.

It is not the profanity or coarseness that makes him famous, but the natural and acquired ability that carries him to the top in spite of his faults. To be bigoted and overbearing is a disadvantage, but to be too lenient and yielding when firmness is called for is equally damaging, and the young physician has mastered a good lesson when he has learned to avoid these two extremes.

We do not expect all physicians to be Christians, but the one who is able to point to the Great Physician when all human agencies fail has the advantage, in that he may get nearer to the hearts of those he serves, in those sad days when there is nothing left but the comforts of the gospel to offer, than in any other way. To be earnest, truthful, reasonable, unaffected, and loyal to his chosen profession are accomplishments that will tell, and the young physician who has equipped himself with all these need have little fear of failure from unjust criticisms.

C. M. H. WRIGHT.

Blaine, Ill.

THE TREATMENT OF ACUTE ENTEROCOLITIS

There is an excellent article on this topic in one of the recent numbers of *The Virginia Medical Semi-Monthly*, written by our good friend Dr. J. Luther Sheppe, of Mt. Sidney, Virginia. The subject discussed is an extremely timely one, since this severe form of diarrhea is very common, at this time of the year, among children under two years of age.

Omitting Dr. Sheppe's interesting presentation of the etiology, pathology and symptomatology of the disease, let us give his method of treatment. He says:

Treatment, which should be instituted early in acute enterocolitis, should be directed to the accomplishment of three objects: (1) To modify the severity of the inflammatory process in order to preserve the integrity of the tissues involved and prevent, if possible, extensive ulceration and necrosis. (2) To sustain the vitality of the patient and reinforce his powers of resistance in the battle for life. (3) To prevent toxin-absorption from the intestinal tract and thus avoid the dangers of autotoxemia.

To this end, therefore, clean out the *primæ viæ* with minimal doses of calomel, 1-10 to 1-6 grain,

every half hour or hour, until one grain has been taken, adding to every third dose, 1-12 of grain podophyllotoxin. Two hours after the last dose, give a teaspoonful of effervescent magnesium sulphate, and repeat every two hours until the bowel has been swept clear of its poison-bearing, bacteria-laden contents. This treatment should be repeated in forty-eight hours. The saline should be given in small, nonirritant doses three or four times a day throughout the course of the disease. By this means the swollen tissues will be cleansed, soothed, and depleted.

Some may prefer castor oil to the saline. If so, two drams should be administered as the initial dose, and small doses several times a day thereafter.

To prevent the formation and absorption of the toxic products of decomposition and putrefaction and to render the upper bowel aseptic, a teaspoonful of a solution of the compound phenol-sulphonates of calcium, sodium and zinc—16 to 20 grains to one ounce—should be exhibited every three hours. Every hour emetine in doses of one milligram, adding to every fourth dose one centigram each of hydrastin and hamamelin, should be administered. If nausea supervenes, the emetine should be discontinued until the next day, and then repeated, until improvement is manifest. Emetine is a valuable drug in all acute bowel troubles, promoting the flow of bile and stimulating healthy intestinal secretions.

To the treatment here outlined, nuclein may well be added in adequate dosage, to reinforce the defensive proteids of the body and to increase vital resistance.

As a topical remedy to allay inflammation, bismuth subnitrate has been largely employed. Thus used, it is best given by enema, in full doses, suspended in a thin mucilage of acacia. One to four drams in a half pint of mucilage may be given in this way. For the same purpose it may be exhibited internally; but to be of any service, massive doses must be used—10 to 20 grains in aromatic syrup of rhubarb, a teaspoonful every two or three hours.

Twice daily the colon should be flushed with decinormal salt solution. I am in the habit of using for this purpose, however, a 1:500 solution of the sulphocarbolates of calcium, sodium and zinc, to which is added two ounces of a preparation of *calendula officinalis*, resorcin, and bismuth. The result obtained from this medication has been highly satisfactory. A No. 16, soft-rubber catheter, American scale, is used in making the injection. Enemata, whether plain or medicated, should be given as hot as can be borne. By this means irritation will be lessened, the swollen and inflamed tissues will be soothed and depleted, and the tenesmus will be greatly alleviated.

After each stool an injection of two drams of a mixture of the aqueous extract of hamamelis virginiana, one dram, and water, one ounce, should be thrown into the rectum, using a rectal syringe, and a compress of gauze to prevent its being expelled. This is a useful measure, also, of overcoming and preventing tenesmus, which it usually does. The old-fashioned starch water and laudanum mixture may be employed for the same purpose.

Hot fomentations, spice poultices, and turpentine stupes over the abdomen are grateful to the patient and aid much in relieving pain and in assuaging the inflamed and hyperemic condition of the bowels. I usually order an inunction, at intervals of three or four hours, of a mixture of equal parts of turpentine

and olive oil, after which the abdomen is covered with flannels wrung out of hot water, applied as hot as can be borne, and renewed as often as they become cool.

Treatment other than here suggested will be symptomatic. Fever, in these cases, as a rule is not of sufficient importance to require special attention. If the temperature reaches 102 degrees or above, a cool or cold sponging for ten or fifteen minutes with plain water or with alcohol and water (one part alcohol to four parts water) every two hours, or oftener if necessary, will not only reduce the fever within safe limits but will quiet restlessness and promote the well-being of the patient. Indeed, it is well to order a cool sponging, three or four times a day, as a routine measure. For this purpose, nothing in my opinion equals a solution of magnesium sulphate, one ounce to the pint, to which ten minims of phenol has been added. If vomiting be troublesome, atropine or hyoscyamine will bring about reaction and put a stop to it in a short time.

If the heart need support, strychnine, brucine, glonoin, cactin, and digitalin, severally or in combination, as the case requires, will prove promptly efficient. Opiates have no place in the treatment of diarrheal diseases of children, for obvious reasons. The only indication for the use of opiates in these conditions is to check decided peristalsis, and this may be better accomplished by other and safer means. If used at all, codeine should be employed in dosage sufficient to produce the desired effect and no more.

Since both digestion and absorption are seriously interfered with in all enteric troubles, the diet should be light, nutritious and free from waste. Food should be given at frequent intervals and in small quantities. The raw white of egg in cold water is most easily assimilated without digestion. This should be given every two to four hours. Barley or rice water to which an ounce of chicken or mutton broth has been added, with a little salt to make them more palatable, should be utilized. Oyster, mutton, beef, chicken, and other animal broths, with the fat removed, will furnish variety. Beef juice, liquid peptonoids, bovine, and other similar preparations will be needed in many cases. Milk should be forbidden and sugar and starchy foods should be withheld until convalescence is well established.

Under the treatment here outlined, with variations to suit each individual case, the percentage of fatalities from this, one of the most dangerous and distressing diseases of childhood, will be small.

MATERNAL IMPRESSIONS

Mrs. S., a healthy lady about 26 years old, was delivered of a well-developed male child weighing 10 pounds, but with an imperfect left arm, extending only to two inches below the elbow. Mrs. S. has three other healthy children. It appears that sometime during the first months of her pregnancy there came a fiddler to the house with the left arm amputated just below the elbow. He exposed the stump to her to get sympathy. She says the baby's arm is

just as was that man's. Does this look like maternal impression? What do readers think?

FRANK JAHN.

Waller, Tex.

[This question of "maternal impressions" has been fought over for years. Scientific men usually deny that the fetus can be deformed by the mother's mental state—but there are thousands of individuals who can not be persuaded that this is so.—ED]

FLIES AND CIVILIZATION

We boast of the high state of civilization in which we are living in this, the twentieth, century of grace, and we hold up our hands and noses in horror at the thought of the crude and careless habits of our not-very-remote ancestors, to say nothing of the revolting practices of savage tribes, and yet we continue to let the foul and ubiquitous fly contaminate our food with dung and all manner of uncleanness, and decimate the ranks of the babies in our large cities during the summer months.

The relative prevalence of flies in a municipality or any locality whatever is an index of the real, true civilization of that community. The fine palace overrun with flies is an abode of barbarians; the clean, flyless cottage is the home of common sense and of hygienic enlightenment, irrespective of where they are found.

Wherever there is filth, there also is the fly, together with its loathsome offspring, the maggot. The fly feeds on filth; lays its eggs in filth (most often in stable-manure); the young (the maggots) are hatched and live their early life in the midst of filth, until they develop into flies and start out on their own career of disseminating dirt and disease among the members of the human family and procreating more flies to carry on the work in the same manner.

The proof is now beyond dispute that the fly is more dangerous to man than all varieties of venomous reptiles and insects put together, and, added for good measure, to all manner of wild beasts that prey upon mankind. One should view a houseful of

flies with more horror and dread than one would feel at finding a rattle-snake under the table or a scorpion on one's pillow.

Abundant facts are now on record substantiating the truth of these statements, having accumulated rapidly within the past five or ten years, but I will cite only two examples of the work that has been done.

The classic and monumental work of the committee which investigated the sanitary (or, rather *unsanitary*) conditions in the southern camps during the Spanish-American War showed, beyond doubt, that the presence of flies in the mess-tents, where the enlisted men ate, greatly increased the number of cases of typhoid fever among the men over those found among the officers, who ate in screened tents. It was also proved that the fly is an unquestionable carrier of excrement and garbage filth (which may be, and often is, infected with disease-producing bacteria), by the observation that flies whose legs were white with lime from the latrines where the excrement from the camp was deposited were found infesting the food on the tables.

A few years ago it was demonstrated, in Cincinnati, by a series of interesting observations, that about one week after flies began to appear in numbers, in the early summer, the percentage of deaths, among babies, from diseases of the stomach and bowels began to go up, and that the deaths from these diseases were proportional to the relative number of flies all through the summer, and gradually went down again when the flies began to disappear in the autumn.

Seeing that flies are disgusting and dangerous creatures, we must set about to limit their numbers and protect ourselves from their depredations.

The former object may be accomplished by strict attention to cleanliness, both on the part of individual families and the municipality as a whole. No garbage, dung or refuse of any kind should be allowed to accumulate or if it seems impracticable to remove it daily, it should be thoroughly protected from flies, either

by screens or by sprinkling with a solution, such as a saturated solution of copperas, that will make it an unfit abiding place for these noxious insects. Flies should be killed relentlessly wherever seen, in any and every manner possible: by traps, fly-paper, fumigations, or with the militant and much-applauded "swatter."

The latter result may be attained by seeing to it that every aperture by which a fly can enter the house is either plugged up or *closely* and *efficiently* screened; not with loose, rattle-trap makeshifts, through the holes or around the sides of which a cat could readily pass, but with tight-fitting, well-constructed window- and door-screens, the latter fitted with some promptly acting and effective closing device, so that children and careless adults may not ruin all our efforts by a moment's inattention. In addition to this, food should be exposed as little as possible in situations where one of these omnipresent marauders will have access to it.

If we will give earnest and thoughtful attention to these points, we shall cut off a very certain and dangerous source of infection with typhoid fever, as well as more frequent though less startling peril from infection with the bacteria that cause the various forms of stomach and bowel diseases so prevalent in the summer and autumn months, while at the same time we are furthering the progress of the race toward a higher and broader civilization.

GEO. B. LAKE.

Ft. Sheridan, Ill.

ALCOHOL AND SPIRIT OF CAMPHOR AS SURGICAL DRESSINGS*

When I was a medical student in Paris, many years ago, alcohol and water or spirit of camphor and water were habitually used for all wounds as a surgical dressing. They were the favorite and almost the only dressings used by the great surgeon Nelaton, who in those days was *facile princeps*. Naturally, there was much to deplore as to the results of operations, and, alas, very

*Reprinted, by permission, from *The New York Medical Journal*.

frequently pyemia, hospital gangrene, and so forth, were daily met with; and on that account many operations were not performed—unless necessity, so to speak, ruled, i. e., the greater chances of death, if no operation was performed.

Since my student-days I have seen many new dressings tried, but I am free to confess, so far as my own predilection is concerned, in later years especially, I have not seen any equal to alcohol, or spirit of camphor, and water (as a rule one part to three—but the former sometimes pure), with or without an impermeable covering of rubber tissue or oilsilk.

Doctor Senn directed attention again to the valuable local use of alcohol—after the late Spanish War—but his practice has not been followed, so far as I know. As for myself, I always use for wounds, bruises, sprains, and so forth, alcohol, or spirit of camphor, and water, in preference to any other applications; and I never have had reason to regret it.

On open wounds one or the other is preferable in every particular to bichloride of mercury or any other antiseptic solution. Indeed, I believe it can be shown, not only in practice, but experimentally, that they have as great antiseptic power, are far more healing, and have no drawbacks.

Within a few weeks, I have seen an instance of ulceration of large dimensions on the nape of the neck, following a very severe case of carbuncle, in which pure alcohol (ninety-five percent) first and subsequently spirit of camphor and water worked wonders. Without their use, I am sure skin grafting would have been required, and perhaps not been successful.

I urge *strongly* that the surgeons who have daily and many opportunities to do so use alcohol, or spirit of camphor, and water dressings and verify very soon my statements, and *not* fail to heed observations and practice simply because they are from a physician. I would add that at times wounds will not heal kindly, unless suitable tonics and food are given. As an addendum, I would suggest also to surgeons who still irrigate, that they use alcoholic solutions to wash out the abdominal cavity, after

cleansing, in cases of diffuse septic peritonitis from appendicitis.

BEVERLEY ROBINSON.

New York City.

THE GENESIS OF CRIME

"Utilizing Criminals" and "What Shall we Do with the Criminals" were two of the suggestive editorials in the May issue of our CLINICAL MEDICINE. As one of the "family" who has taken that breezy and reliable journal almost from the time it was born, I feel like talking back occasionally. And this time I cannot resist giving vent to my feelings.

Why not stop making criminals, instead of spending so much time and money trying to control, reform or punish them? It is astonishing, when we think about it, that we spend over a billion dollars every year hunting down, trying, jailing, herding, and punishing a class of people we call criminals, while at the same time we keep on manufacturing them fully three times as fast as our population increases. These last statements are based upon official information from our prison authorities.

It seems to me to be the height of folly and unreason, for us to fight the fire with one hand and feed the flames with the other, especially when the devouring element is gaining on us so rapidly. As doctors, we have learned to study and to try to remove the causes of the disease that is sapping the life of our patient. Those who have not deserve but a scant measure of success or else they are controlled entirely by unworthy mercenary motives.

Surely, we ought to use as much common sense and reason in our treatment of the body politic as we do, or should, in dealing with the human body. I need not stop to dwell upon the analogy between the physical body and the state. The cells in one represent the individuals in the other. Everyone can see the analogy.

The body politic is sick. And it has been getting worse under the treatment of the two old doctors, Dem. and Rep., for the last forty years at least. The fact that we now have some fifty thousand millionaires who not only do no reproductive work but

are continually hunting the world over for ways to spend their ill-gotten wealth, that 4,000,000 to 6,000,000 who want work are out of work all the time, that tens of millions more are working for wages far inadequate to the procuring of a decent living, that, while animals aid their young and savages allow their young to play, we have forced over 3,000,000 of our children into the most galling wage-slavery, the fact—but I must stop. It sickens me to quote such statistics.

The great cause underlying all these social questions, producing the disease of the body politic, which manifests itself in so many ways, is the private monopoly by a few of nearly all the means of life, together with the transportation of these necessities. This is the one sociologic crime of the century. Remove it, by letting all the people in their corporate capacity own and operate all the great natural monopolies, and most other crimes will vanish like mists before the rising sun. In other words, we must remove the cause of the disease, or the effect will certainly not disappear.

Access to all the means of life, together with the full social product of their labor, must be given all the people. Now the laboring classes get only one-fifth of what they produce. The rest goes to the non-producers. How can the laborers purchase a decent living as long as their purchasing power is thus curtailed four-fifths? And why should they be forced to support a parasite class of millionaires in luxury? And is not every man entitled to work and to get the full product of his labor? To answer such questions as these, is to get at the genesis of crime. Let us stop producing criminals.

Well and truly does Pinkerton, the detective, say: "There are no criminal classes.

... every criminal is potentially an honest man, and with the right kind of encouragement from society will remain honest by preference." With this agree Herbert Spencer, John Stuart Mill, Professor Lombroso, Lester F. Ward, and many others of our greatest criminalologists, statesmen, and sociologists. Even prostitution, which, Dr. Lydston thinks, "is an incurable

social disease," will vanish very largely when girls are permitted to get a good education and given adequate pay for their work and an opportunity to marry.

The so-called criminals are more sinned against than sinning. Society is the real criminal, by forcing economic conditions on her members that necessitate crime. Doctors, above all others, should be wise enough and good enough to find out and help remove the cause. Lincoln well said, "This country can't stand half slave and half free." Nor can it stand all slave, for the poor are now slaves to the rich, and the rich are slaves to their wealth.

S. J. BROWNSON.

Ft. Worth, Tex.

THE CRIMINAL AND CAPITAL PUNISHMENT

Allow me a few words about your paper in the May number of THE AMERICAN JOURNAL OF CLINICAL MEDICINE, page 466, "What Shall We Do With the Criminal?"

You say that capital punishment has no influence on other criminals. Chief Schuettler published over his name the statement that as soon as one or several criminals were hanged there is a decided decrease of homicides in Chicago for several months.

You say that Switzerland has abolished the death penalty. This is not true; it is left to the cantons. Russia had to substitute the court martial for the regular lawful trial in order to circumvent the law against the death penalty.

In the second column of page 467, in the paragraph as to the danger and so forth, you evidently talk about things you do not know anything about, because it is just these pardons which flood our streets with good-for-nothings.

It is a fact that whenever three gentlemen talk together about hold-ups there is at least one of them who had actual experience about being held up. And the money that is being spent for the trials—how much good could be done with it for poor consumptives and hygienic improvements.

DR. HOLINGER.

Chicago, Ill.

[Has it occurred to Dr. Holinger that Schuettler's statement is not quite final—nor scientific? We can prove nothing by segregated facts or cock-sure opinions. We might, with the same sense of assurance, point to the epidemic of murders and executions in Chicago, during the last year, as proof "positive" that every hanging acts as an incentive to homicide. This clearly demonstrates the fallacy of this kind of argumentation. Better evidence, however, is the comparative experiences of communities which have abolished the death penalty, side by side with those which have not.

The doctor is technically correct about Switzerland—but practically wrong. According to the *Encyclopedia Britannica*, seven of the twenty-two cantons of that country legally authorize capital punishment, but, according to the same authority, "there do not seem to have been any cases in which the death penalty has been inflicted" since the repeal of the federal law in 1879. Russia uses the court martial to secure the death penalty—but largely, we might add, for political purposes—to suppress the revolutionists.

As to the danger to society from pardoned murderers, we expressed an opinion merely. We may be wrong—but isn't the Doctor drawing it a little strong when he says that "it is just these pardons which flood our streets with good-for-nothings"? We fear he is jumping at conclusions—where is the proof? In our humble opinion, there are many other factors.

The number of hold-ups is deplorable—but would it correct that condition of things to hang all these wretched, irresponsible and usually drink-ruined boys of the street? We need a quick and firm administration of the law and the certain punishment of crime—but not necessarily more hangings.

We are with Dr. Holinger in his desire to do more for the consumptive and to improve hygienic condition; but we also believe that crime is a social disease, of just as much importance to society as the great white plague, and that none of our time or money will be wasted in efforts to solve the problem of cure. We must try to find

out what is wrong with the criminal—what makes criminals—instead of treating him with the unscientific indifference that has made criminology a contemptible failure.—ED.]

THAT EDITORIAL ON THE CRIMINAL

Your journal is a constant stimulus—and for a simple reason: It breathes earnestness and truth. I don't agree with you always, but I like to read what is written in its editorials.

In the May issue, for example, I am with the second editorial on the criminal more than with the first. Indeed, I wish "What Shall we do with the Criminal?" were reprinted and sent to the governors of each one of our states. The latter part of the editorial should be in italics, so as to make it even more impressive.

The question of how to use prison labor is one, if not the most important, of the questions now before the conscience of the American people. We must have a practical solution of it if we wish to do the right thing. At present we are making more criminals all the time by our unquestionable silliness and brutality.

You are doing a great work. I know of no other journal which is altogether doing so much.

BEVERLEY ROBINSON.

New York City.

EXTERNALLY OR INTERNALLY?

1

Said a truly indefatigable neurasthenic:
"Is my ailment cardiac, gastric or splenic?
From my pelvis to my xiphoid
I endure pains like typhoid,
Whose tortures are worse than Saracenic!"

2

But her recital of these annoyances Gehennic
Appeared lost upon the physician denizenic;
"Your case is comprehensible
Without any ostensible,
Even nugatory, nexus pathogenic!"

3

"Yet allowing that I should be irenic,"
Still persisted the indefatigable neurasthenic,
"At least I am no criminal,
Because something subliminal
Interprets the lucubrations through my phrenic!"

4
 "Your discomforts have no origin pathogenic,"
 Repeated the house physician to the neurasthenic,
 "And they are wholly eradicable,
 Were you a little less indefatigable
 In humoring them," and prescribed for her acid
 phenic.

T. H. EVANS.

Freeport, N. Y.

NEWS NOTES

THE article headed "Contentment Means Decay," which appeared in the last number of *CLINICAL MEDICINE*, page 667, was written by Dr. A. L. Parks, of Rome, Pennsylvania, not Rome, Georgia, as printed. Please note this correction in your copy of the journal.

DR. GEORGE DOCK has resigned the deanship of the Washington University Medical School, St. Louis, but will retain the chair of medicine. Dr. Dock was for many years connected with the University of Michigan, but came to St. Louis from Tulane University, New Orleans. The new dean of Washington has not yet been selected.

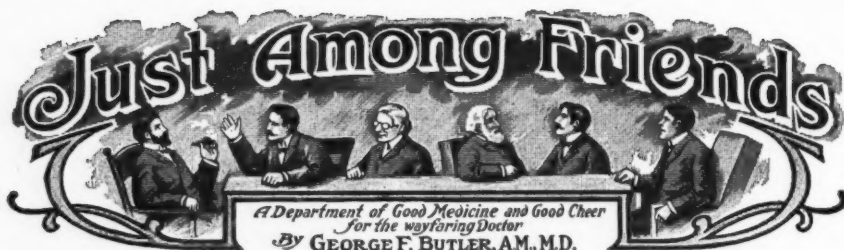
I WAS very glad to receive a program of the thirty-third annual commencement exercises of the College of Physicians and Surgeons, of Boston, of which our good friend Dr. T. D. Crothers—well known to every reader of *CLINICAL MEDICINE*—is dean. One of the addresses of the occasion was delivered by Dr. George F. Butler, whose "Just Among Friends" department appears every month in *CLINICAL MEDICINE*.

THE Illinois State Medical Society did a good thing for the profession of Illinois when it elected Dr. Charles J. Whalen, of Chicago, its president. Dr. Whalen was commissioner of health of this city under Mayor Dunne. He has been a leader in the progressive movement, and has been particularly active in the long and bitter fight to put a curb upon the abuse of medical charities. In this work alone he has earned the right to recognition on the part of every physician in Illinois.

THE attendance at the annual meeting of the American Medical Association this year at Atlantic City was about 3600, and was not marked by the enthusiasm that has characterized some of the recent sessions of this great body. The address of the president, the revered Dr. Abraham Jacobi, was a masterpiece. The new president is Dr. John A. Witherspoon, of Nashville, Tennessee, a brilliant man who has earned the honor. The next meeting of the Association will be held in Minneapolis, Minnesota. That there will be a wholesale hegira to Rochester, among those in attendance, may safely be predicted.

AS USUAL, the big feature of Association week at Atlantic City was the annual banquet of the American Medical Editors Association. In spite of the special arrangements on the part of the official "opposition" for the speedy demise of the journals represented in this body, it is still very much alive—and so are the journals. More than eighty persons sat down to the banquet in the Marlborough-Blenheim. Good dinner, dandy speeches, and the pleasantest of pleasant company. No person who has once participated in one of these affairs will miss the second one if he can help it.

THE publishers of *American Medicine* have taken a step which deserves the commendation of every physician interested in his country's progress in medical science. They have decided to award, annually, a gold medal to the American physician whose work during the preceding year can properly be considered of most value to humanity. The medal is not competitive—it is not a thing to be sought. It will be given only to the men whose work stands out beyond all others as of peculiar service to the world. The following directors have been selected to pass upon the qualifications of those deemed most worthy, and to select the man most deserving of recognition: Dr. William J. Robinson, New York, editor of *The Critic and Guide*; Dr. Claude L. Wheeler, editor of *The New York Medical Journal*; and Dr. H. Edwin Lewis, editor of *American Medicine*.



"IT IS LAW"—A DREAM

I LOOKED out into an April afternoon—lustrous with sunshine and glistening with rain—the fitful, passionate spring rain which is always falling or is immediately about to fall. There was a gentle breeze blowing from the southwest, bearing a peculiar aroma in its breath, which is like new and dearer life to those who love it.

The trees swayed to and fro with an elastic vigor that was beautiful to behold. The light, fleecy spring clouds—opal and palest gray and white, and yet, again, "whiter than white"—careered in impetuous troops before the wind; dividing—meeting again—blending with fresh groups—shaping themselves into forms every moment—now irradiated by the sunlight into brightness at which my eyes ached—now subdued again into softer loveliness—and anon cushioning on their breasts the mystical glory of a *rainbow*.

I sat in my room, looking out across the lawn into the park and up into the clouds, until the afternoon was made glorious by an April sunset which hallowed the sky and made serene the earth.

The passionate gusts of wind and weeping rains had ceased; gray and quiet clouds for a while arched the world, save where, at the west, a golden gate seemed to open wider and more glorious every moment.

Then came the moon, its white rays falling amid the trees like dripping fountains of silent light. All the park was bathed in this luminous flood, and the radiance of it was so penetrating that I could distinguish even the frail delineation of the birches. The last shiver of the air seemed to ruffle this lake of rays, asleep in its sovereign peace, between the elms and the roof of an adjacent building.

The transparency of the warm evening and that odorous renovation of the earth charmed me into pensive reverie, and I soon fell to sleep and dreamed that I was leaning over the parapet of the universe, watching the conflict of the spheres.

Far out into the illimitable space I saw the brilliant birth of planets and the death of exhausted worlds. All about me seething masses whirled, some very small, some infinitely larger, but all seemingly identical in structure. There was one so small I scarcely noticed it, but, as I turned toward the largest and oldest planet, a voice said:

"Nay, turn not away from Earth, for while it is one of the youngest and smallest worlds, it will be the next to throb with life—yea, and the next to die."

And as I gazed, the fiery flames died down, and I saw mighty oceans, and rocks, and earth. Then life appeared in the waters, on the land, and in the air. Mammoth trees and plants grew up, and, while I was admiring the beauty of the verdure, terrific tornadoes uprooted the trees and cast them into the sea. Strange monsters ate of the plants and they preyed upon each other, until the ground was crimson with their blood. Marveling at the devastation and sickening at the sight, I turned away; but, when I looked again, behold, there was no vegetation nor animated life, but, instead, mountains of ice extending in all directions. While I watched, great glaring spurs, inconceivably huge in dimensions, broke away and melted into rolling, swelling rivers, bearing downward under their prodigious pressure the frozen hulks of animals and the detritus of a former age scoured from the earth's surface by the crushing, plunging masses of rock and ice.

Appalled at the frigid desolation of the scene, I closed my eyes in horror, crying:

"Oh! why is this?"

And the Voice said:

"It is Law. Look again."

And where had been avalanches and mighty rivers of ice, I saw wide and beautiful valleys through which quiet streams crept toward the seas, and the glory of the sun bathed valley and mountain.

Suddenly a wave of wondrous melody enveloped me. The sun and stars and all creation burst into one grand oratorio, and, looking into the valley, I saw a man, erect, godlike, and his voice resembled the voice I had heard. Then the earth was flooded with a light so pure, so dazzling that for a while I could not see the valley. The perfume of a delicate incense came to me and I nearly swooned from the music and the fragrance, but the Voice said:

"Behold, my greatest work!" And I saw the man again, and by his side a woman. Rude they were, and nude, yet innocent as infants they played together, and with the animals of the forest, as children play with kittens.

The day merged into night. One by one the stars went out in a rapidly advancing and terrible blackness, and while I stood breathless, awestruck at the gloom and stillness, a flash of light pierced the darkness; and it sought the man and the woman, widening until the whole earth stood revealed beneath a purple sky. Then I saw the man and the woman, with bowed heads and frightened glances pass out of the valley into what seemed to be a great highway. Soon other beings came along, and the road was crowded with a struggling mass of men, and women, and children.

The horror of all I had witnessed before this was as nothing as compared to what now began to pass before my eyes.

Contending hosts, wild with rage and thirst, fought hand to hand. Suckling babes were ruthlessly torn from the breasts of shrieking mothers and dashed to death. A confused mass of maddened elephants, spurred on by men, still more mad, disemboweled and trampled human beings in the bloody mud. Broken pikes and human

limbs swirled in the onrush of men and beasts. Wild boars, bathed with an inflammable liquid set on fire, ran wildly among the living, dying, and dead; and I was stifled by the stench of burning flesh.

I saw conquerors march away, chanting a victorious ode, driving with strokes of cruel whips a horde of vanquished human beings destined to serve as slaves. I saw captive women debauched by lecherous men and then cast into the maws of ravenous beasts. Then, when their thirst for blood had been appeased, the victors built temples to their gods and worshipped in them, sending up loud praises.

But soon the worshippers disagreed, and then new temples and images were erected by the dissenting sects grown in numbers. Wars followed upon wars. Time passed on—silently, relentlessly. Old temples that lifted their spiral curves and kissed the clouds were deserted and soon were lost in desert sands. Nations perished and passed out of memory. Lands once rich with verdure and with food now became changed into arid wastes. The very heavens were black and full of death.

When I marveled at the blight and the awful devastation, the Voice again spake:

"It is Law!"

Sadly I looked down into a dark and cruel world. But as I looked, I saw painted upon the black canvas of the night a cross, and nailed to it, with arms outstretched, a God. I saw Him look with infinite compassion upon the men thirsting for his life, and I heard Him say, in a voice which seemed to be the one I had heard speaking out of nothingness: "Father, forgive them, for they know not what they do."

I could not understand why a being so good should be so cruelly put to death; but the Voice said:

"It is Law!"

A great and holy light went out from the cross and began to illumine the dark and gloomy places of the earth.

I thought that henceforth there would be no more night, nor no more death. But men did not understand, they differed about the light; and soon there were more

wars, wars more terrible than had ever been seen before.

I saw innocent women chained to floors of stone in damp and dismal dungeons. I saw great streams of blood gurggle from headless trunks of martyred men. I saw the quivering flesh of thousands of human beings given up to greedy flames.

The whole earth seemed to be one horrible, mysterious labyrinth, in which men surged, frightened and bewildered, fearful lest at any moment they fall into an abyss of never-dying flame and torture.

Gaunt famine stalked unchecked throughout the land; aye, I saw women's breasts unbared for want of food, and men die with imploring gestures and voiceless lips. Then pestilence came, and it swept the famished living multitudes into heaps of blackened and festered dead.

"Oh! why is all this suffering and death?" I cried. "Can there be no peace, nor joy, nor life?" But the Voice said:

"It is Law. Look upward."

As I raised my eyes, I gazed into a sublime radiance, which rose from the cross and spread out into illimitable space, and, in it, countless shadowy forms were rising from the reeking charnel-house below. There were men, women, and children with their faces wreathed in smiles, and they were welcomed by Him, whom I had seen upon the cross, into a land of honey and of flowers.

Only for a moment was I permitted to gaze into this heavenly abode where life, and joy, and perfect peace reigned without end. Then my eyes again sought the earth, and quickly changing scenes as of a kaleidoscope met my eyes. What I beheld was an alternating tide of the ebb and the flow of peace and of plenty, of suffering and of sin.

I saw golden grain growing ripe and rich upon a thousand sunlit hills. I saw it made into bread which fed and nourished a countless multitude of human beings. I saw it distilled into liquid hell which flowed down the earth like a stream of death, leaving upon its devastated banks a mass of physical, moral, and mental wreckage. I witnessed the passions of men and of

women when they bore the luscious fruit of love, and they blossomed into pure and affectionate homes filled with tenderness and truth and hallowed by the laughter of loving children. And then I saw them bear the blighted barren fruit of lust, and saw them wither in abodes of infamy and shame, their gaudy robes and glittering gems changed at the end for rags and wretchedness, disgusting disease, and horrid death.

I saw men bent on mercenary aims and selfish deeds sail safely o'er a sapphire sea, through days of sun and nights of stars. I saw others, on missions of mercy, tossed on the mad and measureless main and finally sink into an abyss of bitter brine.

I looked into a great city and saw rich men's palaces proudly rear their fluted columns to the sky while hungry women wandered houseless through wintry streets; men living in lavish luxury and others wearing out hand and heart and brain for a scanty crust; fabrics of priceless value molded in store houses while shivering children died unclad. I saw countless tons of coal locked in cellars beneath the feet of freezing men and women; pitiless plutocrats laughed and dined while unemployed and hungry men paced the streets in grim despair. I saw children entertained with books and toys, and others growing up in ignorance and crime; wives caressed by loving husbands in luxurious homes; other women hesitating between "the wolf of want and the abundance of infamy." I saw churches, barred and massive, by the side of hells of vice, where lust ran riot and demons danced. I listened to music in magnificent theaters and to wails of want from tottering tenements.

I breathed the perfume of the boudoir, and was stifled by the odor of the morgue. I saw gray heads of women hid in costly lace, while others covered theirs in handkerchiefs of blue and red.

I saw men reach the very verge of godhood or sink beneath the level of the brute; ambition fail and bodies of good men crumble into dust only to furnish food and flowers for selfish, sinful people, but who, in their turn, were forgotten in that heap of human clay.

I saw healthy children grow to noble manhood and others dwarfed and imbeciled by a father's sins or a mother's ills. I saw a thousand score of happy souls engaged in trade, in pleasure, and in prayer choked to death by a volcano's sulphurous fumes. Across the sunlight of the noon was cast the shadow of the night. Buildings of iron and marble crumbled in the heat while the streets ran red with lava and with fire.

I saw a house filled with young men and women joyous with health and life, and listened to peals of mirth and music and the rhythmic cadence of dancing feet; and then I saw the ruinous rush of a cyclone and the murderous timbers press the warm blood from their quivering forms, and lips that a moment before spoke words of love were cold in death ere the echo died.

I looked into a happy home filled with love's own melody and saw it entered by disease, and the husband and wife bow their faces upon the cold sod that covered the sacred dust of their only child.

I saw all this, and more. But, as I gazed, I thought that the light was all the while widening, and slowly it dispelled the dark clouds from the hills and the mists from the valleys; the songs of peace and the melody of joy supplanted groans and moans. Again birds sang, again lovers told their stories of their hearts; flowers bloomed, and refreshing rains fell upon the thirsty earth.

I believed that at last Life and Peace and Happiness had come, but at that instant it seemed to me that I heard an agonized voice calling out aloud:

"Oh, Doctor, do come at once, my little girl has been run over by an automobile!"

Then the Voice said: "It is Law. Go!"
And I woke.

DIAGNOSIS OF WHOOPING-COUGH BY MEANS OF THE BORDET-GENGOU REACTION

It is well known, says *Paris Medical* (page 77, 1912) how difficult it is to diagnose certain ill-defined attacks of whooping-cough, and how important a diagnosis is in order to limit an epidemic, since the atypical forms of the disease are often just

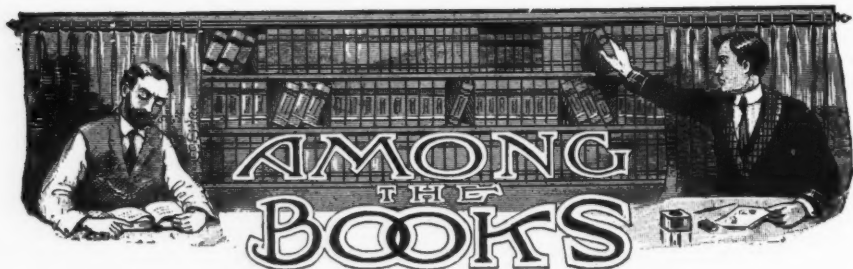
as contagious as the manifest ones. The bacillus, which was isolated by Bordet and Gengou from the expectoration of children affected with whooping-cough, appears to be specific, but it is difficult to isolate it by culture and its demonstration cannot facilitate the diagnosis.

Fortunately, the complement fixation method may here be employed and this reaction, which has given us such interesting results in syphilis and in hydatid liver cysts, seems to be applicable to the diagnosis of pertussis.

During an epidemic of whooping-cough in the neighborhood of Brussels, Mr. Delcourt (*Archives de Médecine des Enfants*, 1911) was enabled by the fixation test to show that the atypical cases of whooping-cough are much more numerous than had commonly been believed, not only in children, but also in adults. Certain children had only a simple bronchial catarrh without paroxysms of cough, without periodical paroxysms of vomiting. In these the Bordet-Gengou reaction was nevertheless positive. They were permitted to attend school, while those affected with typical whooping-cough had been isolated, and the fact of their attendance at school explains the obstinate persistence of the epidemic, since they were bacillus carriers and not known to be affected with the disease. In one of the pupils a test enabled the recognition of an atypical whooping-cough, which had actually been the origin of the epidemic.

The reaction of Bordet-Gengou should therefore be employed in such cases, and if the investigations of Delcourt are verified and confirmed, this reaction will be useful in the differential diagnosis of conditions accompanying paroxysmal coughs and useful in the prophylaxis of pertussis.

The diagnosis of whooping-cough has heretofore been by no means an easy matter, and any method which promises precision is to be welcomed. No doubt there are thousands of undiagnosed cases, and these patients become carriers of the disease. With accurate diagnoses and dependable methods of treatment (with active-principle remedies) the dangers from this disease will be greatly reduced.



THE INTERNATIONAL MEDICAL ANNUAL

The International Medical Annual. A Year Book of Treatment and Practitioner's Index. 1912. Thirtieth Year. New York: E. B. Treat & Co. Price \$3.50.

This splendid reference work has just appeared in its thirtieth volume, and presents, as usual, a résumé of the progress made in medical sciences during the last year. It supplies, as the editor says in the preface, the whole literature on the subject, filtered of extraneous matter, crystallized, submitted to criticism, and so arranged that it is immediately available for reference.

A review of a book of this nature is naturally difficult. The reading matter is in two parts, containing the Dictionary of Medical Matters and Therapeutics in the first, and the Dictionary of Treatment in the second part, followed by a very complete and valuable index.

As was quite natural, the subject of salvarsan has received much attention, because, as the editor says, this has been a year of salvarsan. But there are many other points of interest in it. I find an appreciative editorial note on the therapeutic value of cactus, a review of the action of pituitary extract, notes on scarlet-red, on ionic medication, and, in the Dictionary of Treatment, very complete accounts of the investigations of the year in the practice of medicine, surgery, and the specialties.

The individual reviews are not only faithful as to subject matter, but are also very readable and sometimes acceptably supplied with editorial comment. For the research worker and the author, the refer-

ences given at the foot of each review supply full literary indications for original-source studies.

The International Medical Annual is, however, essentially a book for the practitioner and is recommended to him as embodying all that is known of the medical progress during the passing year.

COTTON'S "JOINT FRACTURES"

Dislocations and Joint Fractures. By Frederic Jay Cotton, A. M., M. D. Octavo, 654 pages; 1201 original illustrations. Philadelphia: W. B. Saunders Company. 1910. Price, cloth, \$6.00 net.

If Scudder, in his treatise on the subject of fractures, covers that particular domain and only incidentally treats of dislocations, a book like the one under consideration must be of particular importance, dealing, as it does, entirely with injuries to the joints, which, naturally, are always combined with a greater or lesser degree of dislocation; in fact, as the title indicates, the book deals with injuries to and about the joints. Dr. Cotton's book thus forms a desirable complement to that of Scudder's.

The study and treatment of injuries of the joints has always been a difficult one; and, while to some extent much light was literally shed on it by the Roentgen-ray, this was not always, as the author correctly remarks, to our aid, but not infrequently a source of confusion. The interpretation of radiographs presents a rather difficult problem and is all but impossible to the uninitiated. It was, therefore, a rather grateful, if difficult, task to review the subject deliberately and specifically. The author's book arose primarily from the results of his own experience, "fortified by

the great mass of admirable x-ray pictures more lately produced, the data of museum specimens, and the great store of valuable operative observations placed on record in the more recent literature."

The author has succeeded excellently in his attempt to state what he believes we really do know of the subject today, freed as far as may be from the encumbering traditions of the earlier days. The text, which is concise and clear, is liberally, in fact profusely, illustrated, and the author has succeeded in placing the illustrations with the text they are intended to elucidate—a matter that by no means is indifferent, although rather unusual—and which adds much to their usefulness and value. Physicians will do well to study this book side by side with that of Scudder.

"PROGRESSIVE MEDICINE"

Progressive Medicine. A quarterly digest of advances, discoveries and improvements in the medical and surgical sciences. Edited by H. A. Hare, M.D., assisted by L. F. Appleman, M.D. Philadelphia: Lea & Febiger. Price \$6.00 per annum.

The second number of volume fourteen of *Progressive Medicine* contains reviews on hernia, by Dr. W. B. Coley; surgery of the abdomen, exclusive of hernia, by Dr. J. G. Clark; diseases of the blood, diathetic and metabolic diseases, diseases of the thyroid gland, nutrition, and the lymphatic system, by Dr. Alfred Stengel; ophthalmology, by Dr. Edw. Jackson.

The amount of literary research involved in the preparation of these numbers is enormous and their value to the practitioner correspondingly great.

EHRlich AND HATA'S "EXPERIMENTAL CHEMOTHERAPY"

The Experimental Chemotherapy of Spirilloles (Syphilis, Relapsing Fever, Spirillosis of Fowls, Framboesia). By Paul Ehrlich and S. Hata. Translated by A. Newbold, and Revised by Robert W. Felkin, M. D., F. R. S. E. New York: Rebman Company. 1912. Price \$4.00.

The reviewer takes great pleasure in announcing this translation of the inter-

esting account written by Ehrlich and Hata of their experimental work concerning the treatment of the spirilloles, inasmuch as this work has directly led up to the discovery of arsenobenzol (salvarsan, "606"), which promises such great things for the future treatment of syphilis and of other diseases due to allied protozoa.

To the student, the book will be of great interest and value. In the nature of things, it is not easy to read, but its study will repay manifold by the greater appreciation of the problems involved in the treatment of the diseases affected, and therefore by the greater efficiency of the practitioner who spends the time and effort in mastering the theory outlined by the authors.

HILL'S "CHEMISTRY"

A Textbook of Chemistry, for Students and Practitioners of Medicine, Pharmacy, and Dentistry. By Edward Curtis Hill, M. S., M. D. Second thoroughly revised, rewritten and considerably enlarged edition, with 100 illustrations in the text and 14 full-page half-tone and colored plates. Philadelphia: F. A. Davis Company. 1911. Price \$3.25.

Hill's "Chemistry" is a very complete textbook upon chemistry as it appertains to medicine, pharmacy, and dentistry, and is equally serviceable to students as well as to those engaged in practice. It does not only describe the chemical characteristics of inorganic and organic compounds, but presents methods for analysis and assay as well as for toxicologic and clinical tests, such as every physician should have a working knowledge of, and as many of them like to carry out.

The reviewer must confess that his knowledge of chemistry is no longer sufficient to pass upon the excellence of the text, but the author's name and standing is a sufficient guarantee for this; and the reviewer has been much struck with the wealth of information, on all possible subjects that can at all be brought under the heading of chemistry, that is contained in this volume. It presents a veritable research-library for the practitioner, who

cannot go wrong in studying the book and using it freely for reference on questions relating to chemistry.

DESPARD'S "MASSAGE"

Textbook of Massage. By L. L. Despard. London and New York: Oxford Medical Publications. 1911. Price \$4.00.

This book appears to us as distinctly worth while for anyone who desires to perfect himself in the theory and practice of massage, a mode of treating various ailments, especially functional in nature, which has justly gained many friends in the last few years.

The first part of the volume is devoted to a treatise on regional anatomy so far as it is necessary for the masseur to know it. The second part takes up the theory and practice of massage, discussing its influence on the nervous, vascular, digestive, and in fact on all other anatomic systems of the body; its various forms of application, and its special administration in certain disorders. Chapters on bandaging and on electric methods, in conjunction with massage, close the text, this being followed by a complete index.

CHAPIN AND PISEK'S "CHILDREN'S DISEASES"

Diseases of Infants and Children. By Henry Dwight Chapin, A. M., M. D., and Godfrey Roger Pisek, M. D. Second Edition. New York: William Wood & Co. 1911. Price \$4.50.

This thoroughly modern book on children's diseases justly pays much attention to the general care and feeding of infants and children. In the diagnosis of the diseases peculiar to early life, the biologic methods have received deserved consideration, and this portion of the book will be found most valuable by every practitioner. The part which deals with special diseases is written in a very practical manner, leaving out much of theory that might confuse and presenting often the personal opinions and conclusions of this author. In a book intended for the student and practitioner,

this is perhaps an advantage, because too much theory hardly makes for clear and definite practice. The book is well written and deserving of recommendation.

WATSON CHEYNE'S "TUBERCULOUS BONES AND JOINTS"

Tuberculous Diseases of Bones and Joints; Their Pathology, Symptoms, and Treatment. By Sir W. Watson Cheyne, Bart. Second Edition. London: Oxford Medical Publications. 1911. Price \$5.50.

In this, the second, edition of his books on tuberculous diseases of bones and joints, the author has deferred to the steadily increasing conservative tendency in the treatment of these conditions; the former readiness to operate having yielded to the lessons of experience, according to which, with careful hygienic and local treatment, the outlook of tuberculosis, especially of the forms met with by the surgeon, is more favorable than used to be thought possible. He believes, however, that the pendulum is swinging too far in the direction of conservatism.

While, of course, no exception can be taken to the surgical treatment advocated by a surgeon of the author's standing, it causes some surprise to note that Dr. Dr. Cheyne is anything but enthusiastic about the vaccine treatment of the surgical forms of tuberculosis, and that he, in fact, frankly declares himself to be disappointed with the results obtained by himself.

Both in Germany and in this country enough satisfactory results have been secured from the combined specific and climatic-hygienic-dietetic treatment, together with such surgical assistance as circumstances required, that comparatively few patients are now subjected to operation unless very positive indications seem to make it imperative.

In spite of the adverse discussion at the Congress of American Physicians and Surgeons, in 1910, we are satisfied that the vaccine treatment is as valuable in surgical tuberculosis as it is in the visceral forms of the disease, and that it affords the surgeon an excellent adjunct in their management.



PLEASE NOTE

While the editors make replies to these queries as they are able, they are very far from wishing to monopolize the stage and would be pleased to hear from any reader who can furnish further and better information. Moreover, we would urge those seeking advice to report their results, whether good or bad. In all cases please give the number of the query when writing anything concerning it. Positively no attention paid to anonymous letters.

ANSWER TO QUERY

ANSWER TO QUERY 5805.—“Phosphaturia.” C. L. P. has a typical case of “hookworm.” This patient is too much reduced to bear the usual doses of thymol. If this were my case, I should clean his bowels out with calomel and podophyllin, and saline laxative, a full dose in a tumbler of water each morning before breakfast. To remove the worms, try the following:

Fluid extract of male fernoz. 1

Glycerinoz. 1

Aromatic elixirozs. 2

M. Sig.: One teaspoonful three times a day, one-half to one hour before meals.

Diet: Bread, butter, eggs, and buttermilk; also maizole in full doses three times daily.

JOHN D. JORDAN.

Eureka Springs, Ark.

QUERIES

QUERY 5820.—“Psoriasis, Pemphigus, Herpes Zoster.” W. D. K., Kansas, wants to know whether we can recommend anything special, tried successfully in psoriasis, pemphigus, and severe herpes zoster.

Psoriasis.—We regret to say that no “generally efficacious” treatment for psoriasis has yet been devised. The underlying pathologic conditions (disorder of the body-chemistry) must be recognized and corrected.

It is absolutely essential that free elimination be maintained and nutrition improved. The patient must avoid overwork, worry, excesses of any kind, nursing or other drain upon the system. An acidemia exists in most instances. To control this, give sodium and xanthoxyl compound, a level teaspoonful, dry on the tongue, an hour before meals. Bilein, pancreatin, and sodium sulphocarbolate an hour after meals. A saline laxative each

morning upon rising. The iodides may be given between meals, or arsenic sulphide, gr. 1-64, after eating; alternating arsenic sulphide with the triple arsenates often proves desirable.

As soon as the acidemia is controlled, give, before eating, iridoid, alnuoid, and rumicoid, 1-3 grain each. In all cases the scales should first be removed with warm epsom-salt solution and an alkaline soap. Carbenzol soap proves excellent, or use one of the following preparations: (1) Oil of cade, drs. 2; antiseptic oil, oz. 1. (2) Resorcin, grs. 10; tar ointment, oz. 1. (3) Chrysarobin, gr. 1; salicylic acid, grs. 15; ether, min. 1; castor oil, min. 5; collodion enough to make oz. 1. Apply with a camelshair brush. Then paint over the area with plain or benzoinated collodion.

The writer has treated several cases of psoriasis successfully, but the treatment has had to vary from time to time in each case.

Indeed, doctor, it is impossible to outline a treatment for the "condition." It is the individual himself who must be mended. The suggestions here given, however, will, we think, prove helpful.

If you have a high-frequency apparatus, use the vacuum-tube; or you may treat, twice a week, with one of the high-candle-power therapeutic lamps on the market, baking thoroughly at each sitting.

Lately, applications of antiseptic oil alternated with thuja and echinaceoid, equal parts, the patient taking epsom-salt sponge-baths every other night (epsom salt, 1 ounce; water 2 quarts; creolin, 20 minims), have given good results.

Pemphigus.—Here dusting powders, such as boric acid with oxide of zinc and starch, are useful, or zinc sterates may be applied. The blebs may be punctured and covered with a dressing saturated with an antiseptic oil or, better still, with equal parts of carbazol and oil. The phosphates (nucleinated) and triple arsenates are always indicated. Disorders of the body-chemistry must be discovered and corrected. In some cases, calx iodata may advantageously be alternated with the phosphates. As a matter of fact, here, as elsewhere, the cause of the pemphigus must be discovered.

Herpes Zoster.—For this condition, an initial purge should always be given: Calomel, gr. 1-6; podophyllin, gr. 1-6; iridoid, gr. 1-6, half-hourly for three hours, every third night, and saline laxative the next morning. Now maintain intestinal cleanliness with the sulphocarbols, and then give laxative containing sulphur, after each meal; nuclein 8 to 10 drops three times daily; locally, camphor-menthol and olive oil, 1 part to 3. It is essential to prevent suppuration, and if the above treatment is instituted, such undesirable condition rarely occurs. If the vesicles are large, they may be painted with flexible collodion containing aristol or compound tincture of benzoin; then a dusting powder may be used and the parts covered with gauze and cotton.

After elimination has been secured, the patient may receive iron arsenate and strychnine three times daily. The triple arsenates serve excellently. Severe pain

is sometimes to be combated. We are inclined to advise a good acetanilid compound. We invariably sponge the patient's body with a warm epsom-salt solution (epsom salt, 1 ounce, water, 1 quart).

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QUERY 5821.—"As to 'Sure Signs' of Pregnancy." H. H., California, asks "a small thing." "Can you," he writes in a letter, "give me symptoms or signs that fail not as to pregnancy? It seems to me that all the signs laid down in books and those I have learned during fifty-six years of practice are 'like signs in dry weather,' good for nothing except to deceive and mislead. Please give some—at least one—unfailing sign, symptom or action that will reveal the truth always. I have seen not one that does not fail, and as I am consulted so often, I feel ashamed to say I do not know."

Believe us, Doctor, you are not alone in your desire to learn of some never-failing signs of the presence of pregnancy. Unfortunately, it is practically impossible to speak positively until the fetal heart-beat can be distinctly heard; and good men have made mistakes even here, gurgling in the intestines or abdominal pulsation having been mistaken for the beat of the heart.

Unquestionably, it is extremely important to establish an early diagnosis, since upon the question as to whether a woman is pregnant or not may depend matters of the greatest importance. Hence, medical men, and especially country practitioners, should be familiar with the various signs and symptoms which indicate pregnancy. It is essential, moreover, that the doctor be not led into the error of attributing a positive value to signs that really are very useful, but only more as supplementary evidence. It must be remembered that there is a vast difference between negative and positive evidence, and a diagnosis should never be made until every factor has been carefully considered.

In some cases, it is possible to say with certainty that the woman is, or is not, pregnant. Then, again, it may be absolutely impossible to form a definite opinion. One case is recorded in which the physician, the sister of the patient, and the patient herself all were agreed that pregnancy existed. The

woman and her sister even added the information that labor had already begun. The appearance of the woman suggested a pregnancy of eight months. However, a thorough examination under an anesthetic revealed the fact that, if pregnancy did exist at all, it was extrauterine. The abdomen was opened and a large fibrocystic tumor of the ovary was discovered—and that alone. "What strange things these mortals be." The woman as also her sister both acknowledged that the former was not married, and it was quite impossible for her to be pregnant! One can easily see how readily a physician could make a fool of himself, or be made a fool of, in such a case.

The symptoms of pregnancy must be divided into two groups, namely, the subjective (symptoms with which the patient acquaints us) and the objective (conditions which we ascertain for ourselves by examination). The subjective signs possess only a negative value, but when used as evidence supplementary to the objective symptoms, they have considerable corroborative worth.

The suppression of the menses in a married woman is the first thing to suggest pregnancy, but it must not be forgotten that suppressions may occur from many other causes.

Quickening of the fetus is said to occur, as a rule, in the eighteenth week. Women who have not before born children may be deceived by the movements of gas in the intestine, but a multipara recognizes the condition readily. If the menses have not appeared and quickening is experienced at the correct date, it is a reasonable supposition that pregnancy is a fact.

Morning-sickness may or may not appear after conception. It usually commences at the beginning of the second month and continues until the end of the third. Its occurrence and duration, however, are very irregular. The physician should endeavor to learn whether other phenomena have manifested themselves, such as salivation, neuralgic affections, changes in temperament, and disorders of the appetite. It is a well-known fact that pregnant women frequently experience longings or cravings completely at variance with their ordinary inclinations.

Having elicited all the information he can obtain by questioning the woman, the doctor will seek confirmatory evidence by examining the woman carefully. In the later months pigmentary deposits occur at the sides of the nose, under the eyes, on the forehead, and in the region of the upper lip.

Still, these so-called "liver-spots" (chloas-mata) may also occur in nonpregnant women.

A few weeks after conception, some degree of fulness of the breasts will be noted by the woman herself, but it is not until the end of the second month that the change becomes noticeable to the physician. The superficial veins become prominent at this time, there is a marbling of the skin, and the areolas become larger and darker; but such alterations are also observed in women suffering from myomata of the uterus or having ovarian tumors. Turgescence of the nipple and the presence of Montgomery's follicles on the areola usually occur in pregnancy only. The presence of fluid in the breasts, after the third month, may mean much or nothing. It is always present in a pregnant woman, but is also met with in cases of uterine enlargement from other causes. Some multiparas, even when not pregnant, have fluid in the breasts.

There is one very positive sign, but one only seldom mentioned in the books. This sign makes its appearance late, being an opaque fluid, secured by pressure upon the mammary glands, and containing colostrum-corpuscles. The *presence of these corpuscles may be regarded as a positive sign of pregnancy*. Some obstetricians consider the secondary areola appearing at the end of the fifth month as exclusively the results of pregnancy; however, at that advanced period more positive proof can usually be secured.

All the foregoing signs—amenorrhea, morning-sickness, enlargement of breasts, presence of fluid, darkening of the areola, pigmentary deposits in the face, and the rest—may be determined without arousing the suspicion of the patient as to the reason of the examination. Every woman suffering from amenorrhea of uncertain origin may or may not be pregnant. While we may have our suspicions, it is not always

well to voice them unless we have some very definite ground to stand upon.

The abdominal and vaginal signs of pregnancy are perhaps of greatest importance. During the first two months, the abdomen between the symphysis and the umbilicus is flatter than usual, the uterus sinking into the pelvic cavity. From the middle of the fourth month, the abdomen enlarges symmetrically and progressively. During the tenth, the fundus falls to the level it occupied at the end of the eighth month. There is marked pigmentation of the linea alba. By means of percussion, the enlargement of the uterus can be observed.

The movements of the fetus can be seen, of course, only during the last three months (earlier some times), but before this period the fetal heart-sounds can be detected. The uterus can be felt, after the fourth month, as it rises out of the pelvis. At this time careful manipulation will enable the examiner to detect the fetus. Until the end of the fifth month, the fetus can be moved in the uterus; but after this period it has grown to such a large size that only a portion (a limb or the head) can be felt by ballottement, as the latter can only be secured from a solid body floating in a fluid, few conditions save pregnancy can present the phenomenon.

The intermittent contractions of the uterus are perceptible from the third month of pregnancy upward (Braxton Hicks's sign). The hand should be laid flat upon the abdomen and gently held there for from five to ten minutes, when the uterus will be found to contract and relax at intervals of several minutes. If these rhythmic contractions and all other accepted signs of pregnancy are present, and the sensation of ballottement can be secured, it is fairly safe to make a *positive diagnosis*.

The changes which take place in the mucous membranes of the vulva and vagina are familiar to every obstetrician, of course, the membrane changing from the ordinary pale-pink to a livid or dusky hue, and this change may be observed as early as the second month, increasing in intensity, while attaining to maximum by the end of the fifth month. Coloration is most

distinct around the urethra on the inside of the labia minora and about the fornices. In most women, it increases in intensity from the introitus upward. Such changes occur, also, during menstruation and in certain cases of myoma.

Changes in the size, shape, and consistency of the uterus occur. The dimensions of this organ at the different months are described in all modern works on obstetrics. It is always advisable to make a careful bimanual examination, bearing in mind that the uterus becomes more globular during the first three months. It is also unusually soft and flaccid. Such softening is particularly noticeable about the cervix and junction of the body and the cervix. By the end of the second month, a change is distinctly noticeable. Such flaccidity of the lower uterine segment was first described as a positive sign of pregnancy by Hagar. It is unquestionably *one of the most reliable of the early signs of pregnancy*.

The fetal heart-beat can be detected from the sixteenth to the eighteenth week. The rate of the fetal heart-beat should be remembered. The uterine *soufflé* can be detected in nearly every case, as early even as the fifteenth week. Often it is possible to hear the fetal heart-sound. But we must remember that *soufflé* may also be present in other abnormal conditions of the Hence, we must regard the uterine *soufflé* as a probable sign of value only when found in conjunction with other symptoms, and the fetal heart and funic *soufflé* as the earliest *certain signs of pregnancy*.

Briefly, the fetal heart-sound is detectable after the sixteenth week; the fetal hearts can be outlined in the last four or four and one-half months; the movements of the fetus can be felt, heard or seen by the attendant in the last three months; and the funic *soufflé* can be heard occasionally during the latter period. Breast changes, vaginal discoloration, Hagar's sign, enlargement of the uterus (all probable signs) will be observed from the second month upward, the uterine *soufflé* heard in the sixteenth week; internal ballottement is possible in the fourth month; intermittent contraction can be felt at this period;

internal ballottement is possible in the fifth month; the enlargement of the abdomen can be distinctly seen at the end of the third month, and progressing at a definite ratio to the end of the term.

An excellent work is Montgomery's "Signs and Symptoms of Pregnancy;" so are Jellett's "Manual of Midwifery" and Edgar's "Obstetrics." But there are numerous other good modern works upon the subject.

QUERY 5822.—"Caulophylloid and Painless Parturition." T. R. M., Ohio, wants the readers of CLINICAL MEDICINE to tell their experience with caulophylloid during pregnancy." Does it cause an easy labor? Will it affect the child in any way? Does it make labor shorter, and how?" The Doctor has a near relative, 35 years old, who is to be confined for the first time, and he is afraid she will have a hard delivery. The Doctor has used the drug in a few primiparas and they had a very easy and short labor, but he does not know whether to credit this to the caulophylloid.

Caulophylloid is a concentration from blue cohosh, or caulophyllum thalictroides. The average dose is from 1-6 to 1 grain. It is generally necessary to continue the drug over a considerable period of time in order to secure definite results.

While we do not understand fully the physiologic action of caulophylloid, we do know that it possesses antispasmodic, diaphoretic, and diuretic properties; moreover, it is a remarkable *partus preparator*, and, if taken for some time prior to confinement, undoubtedly facilitates labor.

Ellingwood, in his "Materia Medica and Therapeutics," says that "the growth of the fetus has been compared to an apple, which, when fully ripened, falls from the tree." The effect of caulophylloid is to prolong gestation until the fetus is fully developed. Labor, being the physiologic process at full term, and not pathologic, is, therefore, less protracted, less painful, and accidents are less liable to happen.

Halo, who has studied the drug carefully, states that women receiving caulophylloid may overrun their time ten or twelve days, yet invariably have easy labors and make good recoveries. Candler, in a paper upon

"Caulophylloid as a Remedy for Rigid Os," recommends the use of 1-3 of a grain of the drug three times daily for the last three months of pregnancy.

Viburnoid may advantageously be added in cases where uterine inertia or rigidity of the cervix has been observed at previous deliveries. A rigid os yields promptly to caulophylloid, especially the knife-blade variety, that is, the resistant ring, which, by preventing the descent of the head, prolongs labor and wears out the parturient woman. In these circumstances, 1-3 of a grain may be given, with a little hot water, every ten or fifteen minutes until three or four doses have been taken. If immediate results are desired, lobeloid 1 or 2 granules, may also be given. False pains of the spasmodic type, hour-glass contraction and spurious labor-pains are relieved by caulophylloid.

In threatened abortion, caulophylloid frequently proves useful, relieving the irritation upon which the trouble depends. Uterine tenderness and pain due to congestion, ovarian and mammary irritation and some forms of ovarian neuralgia yield to full doses of caulophylloid. In amenorrhea in young girls, anemonin and caulophylloid should be alternated, the triple arsenates with nuclein being added for tonic effect.

A very interesting article upon this drug appears in the "Textbook of Alkaloidal Therapeutics."

The Doctor's relative, we are sure, will be benefited by the use of viburnoid and caulophylloid. We would also suggest that during the last four or six weeks she receive, each night upon retiring, 1-2 ounce of castor oil, taken in a little hot milk. The lower abdomen and perineum should be anointed at the same time with warm olive oil.

The writer, by such procedure, has safely delivered several women whose previous confinements were periods of inexpressible distress. In several cases earlier labors had continued for twenty-four to thirty-two hours, and in more than one instance had to be terminated instrumentally. This same woman's last child was born exactly one hour and ten minutes after the first

labor-pain was experienced, and the antecedent use of caulophylloid must get the credit.

If you also have hyoscine-morphine-cactin on hand, doctor, and use it correctly, you can assure your patient that labor will be a comparatively "painless procedure."

QUERY 5823.—"Oxyuria Vermicularis." L. C., Ohio, has a difficult case of pinworms of six years' standing, in which he has exhausted his materia medica without success. The patient is a man of thirty. He asks assistance.

We have had rather extensive experience with this parasite, and have yet to find anything more efficacious than quassoid in full doses internally; copious enemata of a strong solution of quassia chips, and the application to the lower bowel of carbenzol ointment.

As you are aware, the female oxyuris descends to the anus to deposit her eggs, and that, if we can destroy her before depositing the ova (with which the patient frequently reinfects himself), so much the better. Carbenzol or any similar substance promptly kills the oviparous worm.

Santonin, gr. 1-10, and calomel, gr. 1-10, half-hourly for three hours, every third night, for nine days; a saline laxative the next morning; quassoid, gr. 1-12, with one-half a glass of hot water, one-half hour before meals; enemata of quassia infusion taken in the knee-chest position, the fluid retained as long as possible, every third night; carbenzol ointment to the lower bowel (use a pile-pipe) after stool and on retiring. At the end of nine days suspend treatment for a week, and if there is any sign of the return of the parasites, repeat medication. In very rebellious cases, one or two injections of kerosene prove curative, quassoid being exhibited internally for several days.

QUERY 5824.—"Facial Neuralgia." E. T. M., Michigan, is treating a patient for facial neuralgia, "the most severe I ever saw"; the passage of food or drink down the throat causing such intense pain that the patient is starving. The Doctor wishes to try hypodermic injections of osmic acid,

but having never used it, desires to know how to proceed.

Osmic acid is not very extensively used at the present time. The best results with this agent have been secured from the injection of a 1- or 1 1-2-percent solution, 2 minims of which are injected slowly, through a very fine needle, into the sheath of the nerve, after it has been exposed. The use of the drug is limited to cases in which one branch of the nerve alone is involved. The acid dissolves the medullary sheath, thus destroying the nerve-fiber. The operation may be performed under cocaine, but, as it is extremely painful, a general anesthetic is preferable. The writer knows of only one cure by this method.

A later method of treating neuralgias is the injection of 3 minims of 90-percent alcohol into the branch of the nerve. The fluid is thrown through a long and delicate needle into the nerve at its deepest accessible point, at the exit of the skull. Severe pain lasting a few months often follows the injection. Frequently the area of skin becomes anesthetic and remains so for months. Success has been reported by several observers.

Is your patient academic, doctor? We have seen very severe neuralgia disappear upon the correction of hyperacidity and autointoxication. Recently the writer has cured two patients by giving eliminants, intestinal antiseptics, together with the application of guaiacol and methyl salicylate, equal parts, followed by high-frequency current (vacuum electrode).

QUERY 5825.—"Masturbation." E. J. P., New Mexico, applies to us for a cure for masturbation. It is a chronic case and will, the Doctor thinks, "require strong medicine."

We regret to say that there is no medicinal cure for masturbation. Irritative conditions may be relieved, it is true, and in some stubborn individuals we may break the habit by blistering the corona and keeping it sore for several weeks. Erethism will sometimes yield to full doses of salicin, calcium sulphide, and cypripedoid. Monobromated camphor is also a useful drug. Still, in some cases nothing helps.